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IDENTIFIERS	California; Illinois; Indiana; Minnesota; New Jersey; New York

ABSTRACT

The National Association of State Scholarship and Grant Programs/National Council of Higher Education Loan Programs conference on student aid is reported. Following the conference agenda and lists of registrants and conference speakers, the following papers are presented: (1) "Reinterpretation of Hansen's Census Data" (John B. Lee); (2) "Assessment of the Minnesota Tuition/Financial Aid Experience" (Susan Urahn); (3) "Middle Income Choice Problems in Illinois" (Thomas G. Mortenson); (4) "Institutional Selectivity and Higher Educational Subsidies" (John A. Muffo); (5) "How to Tell If Federal Student Aid Programs Are Working" (Michael McPherson); (6) "Overview of the Minority/Poverty Enrollment Problem" (Reginald Wilson); (7) "California State Report" (Samuel M. Kipp); (8) "New Jersey State Report" (Fran Atchison); (9) "Indiana State Report" (John Muffo); (10) "Illinois State Report" (John W. Huther); (11) New York State Report" (Marilyn Sango-Jordan); (12) "Southern States Report" (Joseph L. Marks); (13) "Access to Higher Education for Blacks and Hispanics in Chicago" (Gary Orfield); (14) "Financial Aid Packaging Policies Used for Minorities" (Robert Fenske); (15) "International Perspectives on Student Financial Aid" (Bruce Johnstone); and (16) "Survey Design and Administration" (Diane O'Rourke). References are provided at the conclusion of individual papers. (KM)

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Third Annual NASSGP/NCHELP Conference
On Student Financial Aid Research
May 28-30, 1986
Loyola University of Chicago

THE PROCEEDINGS

Volume 1

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ILLINOIS STATE SCHOLARSHIP COMMISSION

525 W. Jefferson Suite 111 Springfield, Illinois 62702 217:782-6767

SCHOLARSHIPS GRANTS LOANS SECONDARY MARKET (IDAPP)

July, 1986

To Research Conference registrants:

The Proceedings from the Third Annual NASSGP/NCHELP Conference on Student Financial Aid Research is enclosed. The Proceedings includes the papers presented at the conference, a complete list of the speakers and registrants. The NASSGP and NCHELP Research Committees believe you will find The Proceedings to be a valuable reference document.

The central purposes of the annual research conferences are, like the Research network, to link those conducting research on student financial aid and to share and critique the results of our studies. The magnitude of the student aid enterprise requires serious, continuing attention to the policy issues we all face. The complexity of the issues requires our most careful attention. Because our work influences millions of lives, it should be addressed by the most competent, informed, and dedicated researchers.

The quality of the papers presented stands as one measure of the conferences' success. The Proceedings, which contains these conference papers, is referenced and cited with increasing frequency. Another measure of our success is the growth of the conferences since the first in 1984:

Dates	Place	Sessions	Registrations
2/29-3/1/1984	Washington, D.C.	15	65
5/31-6/1/1985	Washington, D.C.	20	72
5/28-30/1986	Chicago, IL	32	93

Thus far, we have been able to offer each of these conferences at the same $75 registration fee and still cover conference expenses.

Additional copies of The Proceedings may be obtained on request from my successor at the Illinois State Scholarship Commission:

Sheila Pruden, Research Director
Illinois State Scholarship Commission
500 W. Monroe, Third Floor
Springfield, IL 62704
Phone: 217/782-6767

I look forward to continuing to work with you from my new position at ACT.

Yours truly,

Tom Mortenson, Chairman
NASSGP Research Committee

VOLUME 1

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RESEARCH COMMITTEES OF THE
NATIONAL ASSOCIATION OF STATE SCHOLARSHIP AND GRANT PROGRAMS
NATIONAL COUNCIL OF HIGHER EDUCATION LOAN PROGRAMS

THIRD NASSGP/NCHELP CONFERENCE ON STUDENT FINANCIAL AID RESEARCH

Dates: May 28-30, 1986
Place: The Edward Crown Center for the Humanities
Lakeshore Campus, Loyola University of Chicago
6525 N. Sheridan Road
Chicago, Illinois 60626

WEDNESDAY, MAY 28

1:00 **Status of Access, Choice and Retention**

REINTERPRETATION OF HANSEN'S CENSUS DATA
John B. Lee, Acting Administrator, National Center for Postsecondary Governance and Finance, University of Maryland

ASSESSMENT OF THE MINNESOTA TUITION/FINANCIAL AID EXPERIENCE
Susan Urahn, Educational Development Programs, University of Minnesota

ENROLLMENT CHOICE PROBLEMS IN ILLINOIS
Tom Mortenson, Director, Policy Research and Analysis, Illinois State Scholarship Commission

INSTITUTIONAL SELECTIVITY AND HIGHER EDUCATIONAL SUBSIDIES
John Muffo, Assistant Director, Institutional Research and Planning Analysis, Virginia Polytechnic Institute and State University

HOW TO TELL IF FEDERAL STUDENT AID PROGRAMS ARE WORKING
Michael McPherson, Senior Fellow, The Brookings Institution

Evening RECEPTION

THURSDAY, MAY 29

8:30 **The Minority/Poverty Student Enrollment Problem**

OVERVIEW OF THE ISSUE
Reginald Wilson, Director, Office of Minority Concerns, American Council on Education

NEW JERSEY STATE REPORT
Fran Atchison, Assistant Director, Policy Research and Planning, New Jersey Department of Higher Education

INDIANA STATE REPORT
John Muffo

ILLINOIS STATE REPORT
John Huther, Deputy Director, Policy Studies, Illinois Board of Higher Education

NEW YORK STATE REPORT
Marilyn Sango-Jordan, Program Research Specialist, New York Higher Education Services Corporation

SOUTHERN STATES REPORT
Joseph L. Marks, Research Associate, Southern Regional Education Board

ACCESS TO HIGHER EDUCATION FOR BLACKS AND HISPANICS IN CHICAGO
Gary Orfield, Professor of Political Science, of Education, of the Social Sciences in The College, and in the Committee on Public Policy Studies, University of Chicago

THE INFLUENCE OF FINANCIAL AID PACKAGING POLICIES ON MINORITY RETENTION
Robert Fenske, Professor of Higher Education, Arizona State University

12:30 Lunch and Keynote

INTERNATIONAL PERSPECTIVES ON STUDENT FINANCIAL AID
Bruce Johnstone, President, State University College at Buffalo

Track 1: Research Tools

2:00 SURVEY DESIGN AND ADMINISTRATION
Diane O'Rourke, Survey Research Laboratory, University of Illinois

2:00 Track 2: Non-Traditional Students

BUSINESS AND INDUSTRY TUITION REIMBURSEMENT PROGRAMS: THEIR IMPACT ON THE ADULT LEARNER
Joseph P. O'Neill, Executive Director, Commission on the Future of Independent Higher Education in New Jersey

FINANCIAL AID AND WELFARE
Janet Hansen, Director for Policy Analysis, The College Board

HOW ADULTS PAY THEIR COLLEGE EXPENSES
James Augustin, Research Specialist, Wisconsin Assessment Center, University of Wisconsin at Green Bay

PART-TIME STUDENT FINANCIAL AID
Marilyn Sango-Jordan

FINANCIAL AID FOR INDEPENDENT STUDENTS
Jacob Stampen, Lee Hansen, Wisconsin Center for Educational Research, University of Wisconsin at Madison

Evening On your own in Chicago

FRIDAY, MAY 30

8:30 **Family Financing of Higher Education**

ACADEMIC AND FINANCIAL PLANNING FOR HIGHER EDUCATION BY PARENTS OF ILLINOIS EIGHTH GRADERS
Rhonda Dixon, Graduate Public Service Intern, Illinois State Scholarship Commission

PARENTS AND ACCESS TO FINANCIAL AID
Lorayn Olson, Assistant Director, Department of Survey Design and Analysis, American Medical Association

HOW FAMILIES PAY FOR COLLEGE
Micheileen J. Treadwell, Director of Admissions, State University of New York at Albany
Alan P. Wagner, Research Associate, School of Education, State University of New York at Albany

EFFECT OF NEED BASED STUDENT AID ON PARENTAL WORK EFFORT AND SAVINGS: THINKING ABOUT ABILITY TO PAY IN A LIFETIME INCOME MODEL
Michael McPherson, for Chip Case, Visiting Scholar, Federal Reserve Bank of Boston

12:30 **Lunch**

RESEARCH ON FINANCIAL AID AT THE NATIONAL CENTER FOR POSTSECONDARY GOVERNANCE AND FINANCE
Jacob Stampen

2:00 **Loan Issues**

LOAN PLANNING MODELS FOR STATE AGENCIES
Steve Cameron, Director for Strategic Planning, Illinois State Scholarship Commission
Paul Marble, Senior Consultant, Touche Ross & Co.

CHARACTERISTICS OF GSL BORROWERS IN REPAYMENT
Joseph D. Boyd, President, Joseph D. Boyd and Associates

LOAN PROGRAMS FOR TEACHERS
Irene Spero, Acting Director for Government Relations, The College Board

FINANCIAL AID INCENTIVES TO STUDY FOR A SPECIFIC OCCUPATION: LESSONS FROM THE HEALTH, MILITARY, TEACHING AND LAW ENFORCEMENT FIELDS
David M. Arfin, California Commission on the Teaching Profession

DEBT BURDENS
Jerry Davis, Director of Research and Policy Analysis, Pennsylvania Higher Education Assistance Agency

PROBLEMS WITH THE CALCULATION OF DEFAULT RATES
Linda Gearl, for Lutz Berkner, Research Coordinator, New Jersey Department of Higher Education

Concurrent Track: Microcomputers

MICROCOMPUTER APPLICATIONS SIG
Dave Carr, Coordinator, Financial Aid Programs, Council of Higher Education, Commonwealth of Virginia

1986 RESEARCH CONFERENCE 05/28/86
CHICAGO, ILLINOIS

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CONFERENCE SPEAKERS LIST
May 28-30, 1986, Loyola University, Chicago, Illinois

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OVERVIEW OF THE MINORITY/POVERTY ENROLLMENT PROBLEM

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ACCESS TO HIGHER EDUCATION FOR BLACKS AND HISPANICS IN CHICAGO

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CHANGES IN STUDENT PARTICIPATION RATES

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For

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Changes in Student Participation Rates

The question has been raised as to whether student aid makes any difference in whether lower income students attend college. In 1982, Lee Hansen (unpublished) reviewing Current Population Survey (CPS) data, High School and Beyond (HSB), and the 1972 National Longitudinal Survey (NLS), came to the conclusion that aid had not made a difference. The basic evidence provided was the fact that if the college age population was divided into two groups of one above and one below the median income there has been no change in participation rates of the lower income group between 1972 and 1978-79. Hansen notes that this was a period during which billions of dollars of student aid had been awarded to lower income students and he argues that there should have been some increase in the proportion of low income students attending college as a result. Therefore, he concludes, student aid has made no difference.

Hansen presents his study as a preliminary estimate and he notes that his techniques can be questioned. Given the caveats he states that:

> "...we are forced to conclude that student financial aid simply operates as a transfer program--that by substituting public for private funds it reduced the financial burden of college parents and students without inducing additional enrollments or even changing the mix of present enrollments..."

Even though it was a preliminary study, it was widely distributed in the Department of Education (ED) and has had a significant impact on Department policy recommendations.

The report has been criticized on several points. First, the base year enrollment of 1971-72 reflects the effects of Vietnam induced enrollments. There are two aspects to this problem: 1) The civilian population was reduced because people overseas or living on military bases are excluded from the population; 2) A number of people enrolled in college in order to escape the draft. The result was that an artificially high proportion of students was reported as enrolled in college.

A second problem is the lack of distinction between dependent and independent students. Hansen included only dependent students. An increasing proportion of the student aid dollars are going to independent students and their proportional enrollment is increasing. He also does not identify aid going to graduate students or proprietary school students.

A third problem is that Hansen assumes that students in the lower half of the income distribution were the recipients of financial aid. He does not include any empirical evidence on who received aid and how that distribution changed through time.

Finally, he assumes that the larger problems in the economy which included inflation and recession have had no effect. It well could have been that without student aid, enrollments would have dropped, not increased. In fact, the median income dropped for United States families in

the time period used by Hansen. There were more poor people in the late 1970's than there were in the early 1970's.

In replicating the Hansen study several changes were made to try and solve some of the problems raised by critics. First, the number of years of data was increased and base comparison years were changed from 1969 to 1983 with intervening years included. Second, the universe used was high school graduates who had not completed four years of college in the age group 18-24. Third, family income was divided into nine income categories and corrected for inflation. Fourth, independent students age 18-24 were included as a separate category. Fifth, information on the receipt of student aid was included as part of the analysis. The student aid data was taken from the information provided by first-time full-time freshmen collected for The Freshman Norms study by the Higher Education Research Institute at UCLA. This provides an approximation of changes in student aid policy over the years. For purposes of this study, student aid was limited to federal grants and self-help assistance which is loans and college work study. The student aid data is available only for the years 1974-1981.

One of the limitations faced by Hansen was not solved in the new analysis. CPS does not provide reliable information on noncollegiate enrollment. This is one of the fastest growing sectors in postsecondary education and the students enrolled in this sector receive a significant share of federal student aid dollars.

Results

Table 1 displays the participation rates for 1969-70, 1978-79, 1981-82, and 1983-84. These results indicate that the proportion of black students attending college peaked in 1978. By 1983 the proportion of blacks in college had declined to 1969 levels. There has been an increase in the proportion of independent students attending college since 1969. It is assumed that the high participation rates of dependent students enrolled in college in 1969 reflects the Vietnam War phenomena. Generally speaking the overall enrollment of the age group has been relatively stable for the time period.

Table 1. Summary of Participation rates, College eligible students 18-24

Category	1969	1978	1981	1983
All students	31.2	28.4	28.4	29.8
All white	31.8	28.1	30.1	30.3
All black	24.1	27.8	25.4	24.1
All dependent	48.8	42.4	43.0	41.5
All independent	8.4	11.4	12.3	11.7

Current Population Survey, Census Bureau

Table 2 presents participation rates of dependent students by income groups. All income categories have been corrected for inflation and are reported in 1981 prices.

Table 2 Participation rates by income, College eligible students 18-24 (Dependent Students)

Income category	1978	1981	1983	Change 1978-83
$0-9,999	30.3	28.2	25.7	-4.6
10,000-19,999	36.0	34.6	31.3	-4.7
20,000-29,999	36.3	40.7	36.1	-0.2
30,000+	49.9	52.8	52.4	+2.5

Current Population Survey, Census Bureau

The most striking result is that participation rates for those under $20,000 family income have declined while those for the over $30,000 income group have increased. It should be noted that the base year is 1978, well past any increases that may have been caused by the Vietnam draft.

The third table reports participation rates for whites, blacks and Hispanics age 18-24. Hispanic is anyone who defined themselves as Hispanic regardless of racial category.

Table 3. College Participation Rates by Race and Ethnic Categories (Dependent Students)

	1978	1981	1983
White	43.2	44.5	43.5
Black	35.6	31.6	29.1
Hispanic	31.6	36.0	33.2

Current Population Survey, Bureau of the Budget

It should be noted that in 1978 blacks in the age group were more likely to be enrolled in college than Hispanics. By 1981 the rates had reversed themselves; Hispanics were more likely to attend college than blacks. Whites have maintained a fairly stable proportion in college.

Table 4 represents the percent of first time full-time freshmen reporting receipt of federal aid in the years 1974 and 1981 by income category. The income categories are corrected for inflation.

Table 4. Percent of Students receiving aid by income categories.

Income category	1974	1981	Percent change
0-5,999	69.8	67.3	-3.6
6,000-12,499	49.13	65.47	+33.3
12,500-19,999	42.34	58.05	+37.1
20,000-29,999	32.17	50.77	+57.8
30,000-39,999	22.73	42.77	+88.0
40,000+	10.24	31.53	+207.9
Independent	33.83	54.17	+60.1
No income reported	13.51	30.91	+123.5
Total	28.21	47.24	+67.5

Freshman Norms, UCLA

The striking result is the increase in the proportion of students with over $40,000 in income reporting receipt of aid in comparison to the actual decrease in the proportion of students in the lowest income category reporting receipt of aid.

This time period reflects the change in receipt of aid due in part to the changes introduced by the Middle Income Student Assistance Act of 1978. Most of the increases can be accounted for by the increases in the GSL program. Policy changes since 1981 have reduced the awards given to those over $40,000, but a greater number of middle income students receive awards now than was the case in 1974.

Using the Freshman Norms data and correcting for inflation it is noted that the size of the average grant declined for all students, but most sharply for the lowest income students. The liberalization of the needs analysis system resulted in increasing numbers of higher income students receiving a grant while the proportion of lower income students reported a loss. The loss is due to the fact that low income students are more likely to have received a maximum grant which did not increase with inflation.

Given the correlation of income and race, the proportion of whites receiving aid has increased more rapidly than blacks. Whites are more likely to use loans than blacks in the time period observed.

Conclusion

The decline in low income student participation rate is coincidental with the decline in student aid available to that group. The effect of inflation and the expansion of eligibility to middle income groups engendered by the Middle Income Student Assistance Act left lower income students with less money. The simultaneous loss of Veterans education benefits and Social Security education assistance, which are not needs tested programs but helped a number of lower income students attend college, made the cost of college attendance even greater for lower income students.

Other factors help account for the declining participation rates of lower income students. First, there are more lower income people in the population. The combination of inflation and unemployment has resulted in an increased number of poor. There has been a recent erosion of welfare and other forms of public aid for low income groups. As noted before there are non-financial factors such as changing women's roles, the end to the draft and changes in family structure that may influence the propensity to go to college.

With all of these considerations, it is not unreasonable that the proportion of lower income students attending college has been declining. The decline is consistent with the proposition that the cost of college has increased while the amount of aid, especially grant aid, available to lower income students has declined. Lee Hansen's observation that the proportion of lower income students attending college has declined is correct, it is his explanation of why that has happened that is incorrect.

Assessment of the Minnesota Tuition/Financial Aid Experience

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A paper for presentation at the National Association of State Scholarship and Grant Programs/National Council of Higher Education Loan Programs Research Conference, May 28, 1986.

The State of Minnesota is currently undertaking a major public policy experiment. It is moving away from its traditional policy of providing low tuition levels at public postsecondary institutions and moving toward a new policy that couples higher tuition levels with increased amounts of need-based student financial aid. In effect, it is replacing a blanket subsidy for all postsecondary students with a targeted subsidy aimed at those students with demonstrable financial need. The goals are increased fiscal efficiency and improved equity in the disbursal of tax-generated revenues. The risks of the new policy, according to its critics, are that raising tuition levels in the midst of an era of declining federal student aid will curtail educational opportunity in the state, regardless of the accompanying rises in state student aid funding.

In a project jointly sponsored by the Center for Urban and Regional Affairs, the Interactive Research Grants Program, and the Office of the Vice President for Academic Affairs, University of Minnesota, we addressed the need for evaluation of this policy experiment. The final report generated as a result of this project is titled Targeted Subsidization of Postsecondary Education Enrollment in Minnesota: A Policy Evaluation. This paper is a chapter by chapter overview of that report.

As we began this project, we asked a number of questions. How are current and prospective students in the state reacting to the changes in the pricing of postsecondary education? Are recent rises in tuition really leading to significant declines in postsecondary attendance among lower-income students, despite the parallel increases in student aid funding? Overall, are student access and choice being seriously diminished?

Debates over these questions have filled the state's newspapers and airwaves in the past few years, yet adequate answers are not easily obtained. A variety of economic, psychological, sociological, and cultural factors can influence student attendance patterns, and discerning their distinctive influences is difficult. The literature regarding the influences of various factors is reviewed in Chapter 2 of the report. The review suggests that socioeconomic status and other family background factors have strong influences on college attendance pat-

terns, as do factors relating to ability, achievement, aspirations, and expectations. Contextual effects, such as the social class and ability contexts of high schools, have small but significant effects. Financial factors, independent of other family characteristics, seem to have moderate to strong effects, depending on the phase of attendance considered: their effects are particularly strong in students' choice of a college to attend, but less strong in students' basic access decision (whether or not to pursue postsecondary education).

Of the above influences, only a few are easily susceptible to manipulation by policymakers in their pursuit of equality of postsecondary opportunity. Obviously, parents' social class, income, and educational and job attainments are beyond policy. High school contexts, as well as student plans, and hopes, can indeed by manipulated successfully, but the costs can be high. The tactic of policy changes in cost factors stands out as potentially one of the most efficient and effective approaches for pursuing equity in postsecondary expectations and attendance. Yet longitudinal research on the effectiveness of alternative financing approaches has rarely, if ever, been conducted. Such was the intent in the present study, the Minnesota Postsecondary Education Enrollment Project (MPEEP).

Chapter 3 presents the design for the project. The research sought answers to four questions. Three of those questions correspond to what some analysts have called the three core aspects of postsecondary attendance: access, choice (institutional destinations), and persistence (although the last could be a focus only indirectly, by way of aid package quality, due to data limitations). The other question addresses what many studies find to be the critical mediating factor in attendance decisions: educational expectations and plans. Financial and other potentially limiting factors may have their most deleterious influences on attendance indirectly, by way of their effects on early planning, rather than

directly at the time of final matriculation decisions. In keeping with the focus of this study, the four questions thus are phrased to address issues relating to changes over time in the determinants of postsecondary expectations and plans, access, destinations, and aid package quality in Minnesota. Together, the four questions comprise the core of the policy evaluation problem:

> Question 1 (Postsecondary Expectations and Plans): Have financial factors begun to play an increasing role in explaining Minnesota high school students' postsecondary expectations and plans?
>
> Question 2 (Postsecondary Access): Have financial factors begun to play an increasing role in explaining whether or not Minnesota students undertake postsecondary education?
>
> Question 3 (Postsecondary Destinations): Have financial factors begun to play an increasing role in explaining which institution Minnesota college-bound students attend?
>
> Question 4 (Postsecondary Aid Packages): Among similar needy students attending similar colleges in Minnesota, has the quality of aid packages declined in recent years?

There exist two radically different sets of expectations for answers to these questions. These contrasting expectations correspond to the two opposing postsecondary financing philosophies introduced briefly in Chapter 1: targeted subsidization versus blanket subsidization. Proponents of targeted subsidization believe Questions 1 through 4 will be answered negatively. They perceive the low tuition levels historically provided by state postsecondary systems (in Minnesota and elsewhere) to be both inefficent and inequitable. Opponents of targeted subsidization, however, believe the provision of low tuition has been the keystone of this country's success in opening higher education to the masses, and believe that backing away from that policy (even with increased financial offsets) will likely lead to affirmative answers to the four questions.

To find answers to the first three questions introduced above, the research project employed both existing and newly collected data for three cohorts of Minnesota students: the high school classes of 1980, 1982, and 1984. These years cover the period in which Minnesota moved strongly in the direction of targeted subsidization. They thus allow examination of changes in attendance and student financing patterns in relation to changes in policy. Primary data for these first three questions came from the annual Student Plans and Background Survey (PBS) of the Minnesota Post-High School Planning Program (PSPP). These annual surveys by the Minnesota Higher Education Coordinating Board (HECB) explore the backgrounds, plans, and attitudes of Minnesota high school juniors. The PBS surveys did not significantly change format or items over the four-year time period under study here. PSPP samples cover from 75 to 85 percent of Minnesota high school juniors in any given year. These data were supplemented with other HECB data on students' high school rank and tested ability. For the analyses of postsecondary attendance and choice, the data were supplemented with survey data gathered especially for the present study.

The analysis of the fourth question, on aid package quality, relied on a separate data source; the Scholarship and Grant File of HECB. This file contains information on the federal and state grants received by students at Minnesota institutions.

The four chapters following Chapter 3 report the results of our analyses of the four focal questions. Chapter 4 examines postsecondary expectations and plans among high school juniors in 1979, 1981, and 1983. The results strongly suggest that the level of Minnesota students' postsecondary expectations and plans has not been lowered by the increased targeting of state funds, and that expectations and plans are continuing to be affected mainly by academic factors, such as ability and achievement, rather than by parents' financial circumstances.

The effects of financial factors on expectations and plans appear, in fact, to be negligible. In other words, we conclude that Question 1 must be answered negatively: there has been no detectable deterioration in the primarily meritocratic determination of postsecondary educational expectations and plans.

Chapter 5 presents the results of our analysis of postsecondary attendance (access). The findings suggest that attendance rates remained remarkably constant across the three cohorts, and that the primary influences were students' high school achievements and previous expectations for attendance. The effects of parental income levels were relatively constant and minimal across the three cohorts, with no sign of increasing influences over time. Therefore, the influence of state policy changes appears to have been negligible. That is, Question 2 must be answered negatively: there has been no noticeable deterioration in the primarily meritocratic determination of postsecondary educational attendance.

Chapter 6 discusses the findings of our analyses of Minnesota's college-going going students' postsecondary destinations (e.g., a state college, as opposed to a private institution). The analyses presented there suggest that the factors most central to students' expectations, plans, and access are also those most central to their choices. That is, the primary determinants seem to be academic rather than financial. As expected, the role of family income level in choices was somewhat greater than its role in expectations, plans, and access, but there was no evidence that its role was increasing over time. Changes in state policy appear not to have hampered the choice process. Therefore, as with Questions 1 and 2, Question 3 was answered negatively: there has been no noticeable alteration in the primarily meritocratic determination of postsecondary destinations.

The Chapter 7 analysis used a student aid data base to assess the financial status of financial aid applicants on Minnesota campuses. Specifically, it addressed the issue of how well the calculated postsecondary costs of students at

varying family financial contribution levels were met by state and federal grants in 1980-81, 1982-83, and 1984-85, respectively. Unlike the work of the preceding three chapters, the findings here indeed suggest evidence of dramatic change over the time period studied. For dependent students, decline in the adequacy and quality of student aid packages between 1980 and 1982 was ameliorated somewhat in 1984, as new state policies worked to offset increasing educational costs. For some of these students, grant aid was meeting a higher proportion of costs in 1984 than in 1980. For most independent students, however, decline in the adequacy and quality of aid packages continued throughout the 1980-84 period. The findings of Chapter 7 thus give an equivocal answer to Question 4. Between 1980 and 1984, dependent students neither gained nor lost much overall, while independent students lost, on the whole. The causes of the deterioration in aid packages among independents seem to lie in both federal aid cutbacks and changing state grant policies.

What messages might the MPEEP study provide policy makers? First, the recent cuts in federal Pell Grant growth have clearly been felt by many students. Pell Grants are the basic need-based federal aid program, and the data on aid packages in Chapter 7 show definite drops for most independent students in nonreturnable aid as a proportion of total costs over the 1980 to 1984 period. State sources have not fully offset the federal cutbacks. Second, the influence of academic factors already largely established by the junior year in high school has remained primary in determining postsecondary expectations and plans, access, and choice, even in the face of federal cuts (see Chapters 4, 5, and 6).

Had we found the attendance influences of family income to be rising over the period assessed in our study, it would have been difficult to discern whether targeted state subsidies, federal aid cutbacks, or other factors were most to blame for the losses in equity. Without evidence of growing income effects, how-

ever, it may be concluded that, while college has unquestionably become more expensive for many students (due undoubtedly both to targeted subsidy policies and federal aid cuts), the rising costs have not so far significantly damaged attendance plans and patterns. Other studies with more extensive data sets and broader scopes may modify that conclusion. For now, though, the case for declining equity in attendance patterns remains unproven and, at heart, unconvincing.

For a copy of the full report:

Hearn, James C., Susan Urahn, and Hidecki Sano. Targeted Subsidization of Postsecondary Education Enrollment in Minnesota: A Policy Evaluation. Publication No. CURA 85-9, Center for Urban and Regional Affairs, Minneapolis, MN, 1985.

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ENROLLMENT CHOICE PROBLEMS IN ILLINOIS

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Presented at the
Third Annual NASSGP/NCHELP Conference on Student Financial Aid Research
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ENROLLMENT CHOICE PROBLEMS IN ILLINOIS

Abstract

This paper examines problems of enrollment choice for dependent undergraduate state grant applicants from middle income families and for black students in Illinois since 1980. Many grant applicants have lost most or all eligibility for grants under the federal Pell Grant Program and the Illinois Monetary Award Program since 1981. As a result, some of these grant applicants have changed their higher educational enrollment choice from private institutions to public universities. In response, private colleges have expanded their own institutional grant programs, attempting to try to offset the decline in grant eligibility. Some public universities have responded to this enrollment influx from private colleges by altering their admissions policies and practices. As a result of these admissions changes, black enrollments have declined in Illinois senior institutions and increased in community colleges. The conclusion is, while financial aid policies tried to protect economically disadvantaged populations - represented by blacks - at the expense of more affluent populations, the enrollment shift of middle income applicants from private institutions to public universities caused admissions and financial aid policy changes in senior institutions. These changes adversely affected the populations financial aid policy attempted to protect.

Introduction and Background

This paper examines the effect of reduced student financial aid availability since 1980 on Illinois undergraduate enrollment behavior.

The purpose of student financial aid is to reduce or eliminate economic barriers to higher educational enrollment decisions of access, choice and persistence by students. The Illinois Higher Education Student Assistance Law put it this way in 1967:

> The General Assembly has found and hereby declares that the provision of a higher education for all residents of this State who desire such an education and are properly qualified therefor is important to the welfare and security of this State and Nation, and consequently is an important public purpose; many qualified students are deterred by financial considerations from completing their education, with a consequent irreparable loss to the State and Nation of talents vital to welfare and security. The number of qualified persons who desire higher education is increasing

> rapidly, and the physical facilities, faculties, and staffs of the institutions of higher learning operated by the State will have to be expanded greatly to accommodate such persons, with an attendant sharp increase in the cost of educating such persons. A system of financial assistance of scholarships, grants, and guaranteed loans for qualified residents of college age will enable them to attend qualified institutions of their choice in the State, public or private. (emphasis added)

The amount of gift assistance available to Illinois undergraduates has increased since 1980. However, the combined effects of application volume growth, increasing college costs, and decreasing applicant resources have increased applicant demand for grant assistance far greater than the increased amounts provided. Thus, real aid for students has decreased. Figure 1 shows the amount of Illinois MAP dollars, and federal SEOG, Pell and SSIG dollars available to meet tuition and fees per Illinois grant applicant for the years 1969-70 through 1985-86. Since 1980-81, the amount of aid available per applicant has decreased by nearly half in Illinois.

This study examines the effect of this declining grant assistance on student enrollment behavior in Illinois. It focuses first on dependent grant applicant institutional choice. Then, it examines institutional responses to this enrollment shift. The effects of changing institutional financial aid and admissions policies and practices on student enrollments in Illinois are described.

Problems for Middle Income Families

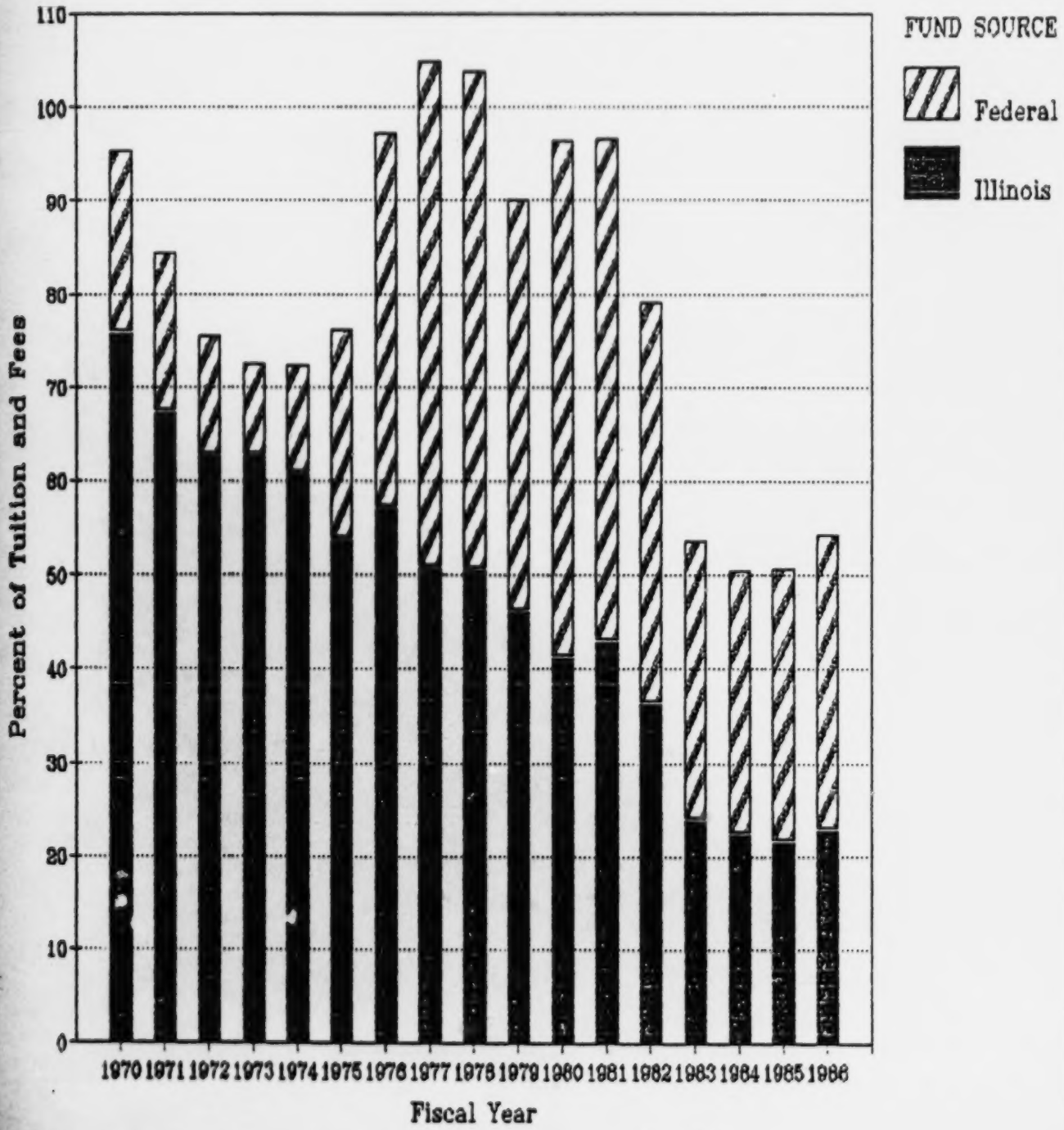
Since about 1980, the population of the United States and Illinois has been redistributed along family income lines. There are now more lower income, more higher income, and fewer middle income families than there were just a few years ago.

Thurow has observed that between 1978 and 1984, the proportion of households with incomes between 75 percent and 125 percent of the median fell from 27.1 percent to 23.2 percent of all households. He attributes this change to loss of jobs in industries that sell their products in international markets.(1)

Similar findings are reflected in a variety of student aid applicant data bases. The report on fall 1983 college freshmen characteristics from UCLA observed that:

> The incomes of the students' parents showed unusual trends in the 1983 survey. While the percentage of families earning high incomes ($40,000 or more) went up (from 24.9 to 26.9), the percent earning low incomes (less than $12,500) also increased (from 15.7 to 16.5). This pattern is unprecedented in the history of the survey ... Although we cannot be sure of the reasons for this year's unique pattern, it may be that recent economic events have served to redistribute income from the less to the more wealthy.(2)

FIGURE 1
STATE AND FEDERAL UNDERGRADUATE GRANT AID PER AID APPLICANT AS A PERCENT OF TUITION & FEES 1969-70 TO 1985-86



Federal programs include Pell, SEOG and SSIG

Data on Pell Grant applicants also show this growth in lower income grant applicants, although the income intervals used by the federal government to tabulate Pell applicants by family income do not lend themselves to this kind of analysis.(3)

Similar data exist for the Illinois Monetary Award Program (MAP) dependent applicant population. Table 1 shows the number and distribution of these applicants from 1979-80 through 1985-86 in constant dollar family income intervals.

Table 1
Distribution of Dependent MAP Applicants by Status and Family Income Levels
1979-80 to 1985-86

	Family Income in CY1978 Dollars[a]											
Academic Year	0	$1-$4,999	$5,000-$9,999	$10,000-$14,999	$15,000-$19,999	$20,000-$24,999	$25,000-$29,999	$30,000-$39,999	$40,000-$49,999	$50,000 & over	Total	Median
79-80	4,272	6,342	13,015	13,922	16,511	17,401	12,216	8,305	1,323	429	93,736	$17,821
80-81	3,825	6,243	12,604	13,402	16,192	16,553	11,472	7,462	1,084	378	89,215	17,635
81-82	4,330	6,601	13,836	14,583	16,035	16,422	11,763	8,315	1,322	395	93,602	17,323
82-83	27,474	7,487	15,371	16,353	14,958	14,306	10,952	9,603	1,953	620	119,077	12,815
83-84	23,155	9,053	17,514	18,220	16,522	14,674	10,696	9,330	1,789	595	121,548	13,033
84-85	25,143	9,114	16,654	17,997	16,071	14,116	10,270	8,888	1,693	608	120,554	12,602
85-86	18,857	10,526	19,426	19,660	17,937	14,876	9,996	7,553	1,319	467	120,617	12,925
Change 79-80 to 85-86:												
N	+14,585	+4,184	+6,411	+5,738	+1,426	-2,525	-2,220	-752	-4	+38	+26,881	-$4,896
%	+341%	+66%	+49%	+41%	+9%	-15%	-18%	-9%	nc	+9	+29%	-27%

[a]1979-80 family income intervals are based on CY1978 family income. These intervals are increased for each subsequent year by the percentage increase in Illinois per capita personal income for each year after CY1978.

In Illinois, the recessions of the early 1980s have adversely affected a significant number of middle income Illinois families. Figure 2 illustrates this impact on dependent MAP grant applicants in Illinois. Between the 1979-80 and 1984-85 academic years, the Illinois Monetary Award Program experienced a significant increase in lower and higher family income grant applicants and a loss in middle income grant applicants.

Note: In 1979, average family income in Illinois was $25,912. The median was $22,746. Roughly defined, middle income families are those in the $20,000 to $30,000 range, in 1978 dollars. The above intervals increase in subsequent years by the percentage increase in Illinois per capita personal income. The resulting redefinition of income intervals is shown in Table 2.

Figure 3 shows the redistribution in dependent Illinois MAP Grant applicants between 1979-80 and 1985-86. Here, the redistribution through a period of economic recovery in the Illinois economy continues: more lower income; fewer middle income; and some more upper income grant applicants. The data for 1985-86 also suggest that higher income students may no longer be applying for grant assistance.

FIGURE 2
CHANGES IN DEPENDENT STATE GRANT APPLICANTS
BY FAMILY INCOME
BETWEEN 1979-80 AND 1984-85

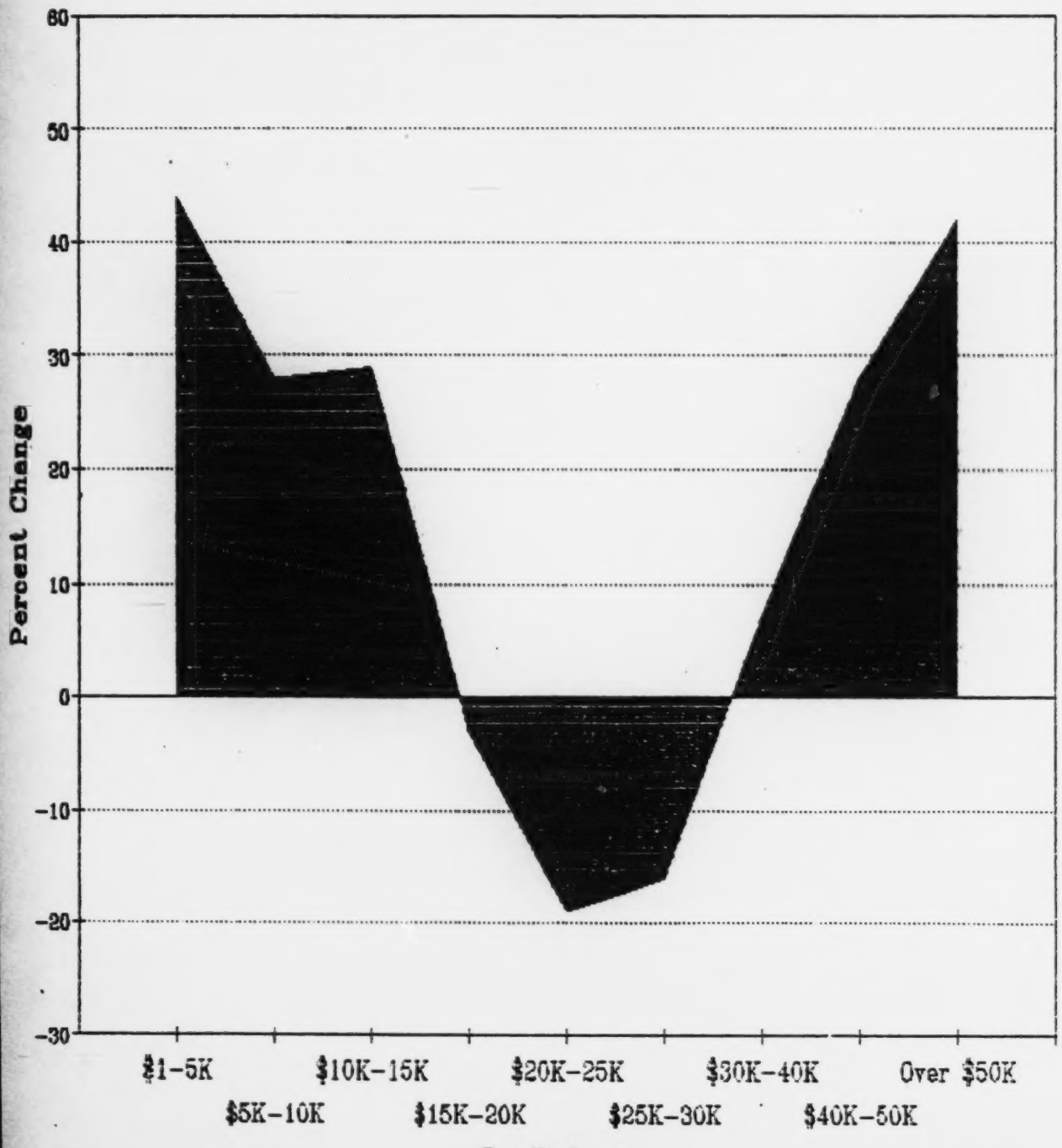


FIGURE 3
CHANGES IN DEPENDENT STATE GRANT APPLICANTS
BY FAMILY INCOME
BETWEEN 1979-80 AND 1985-86

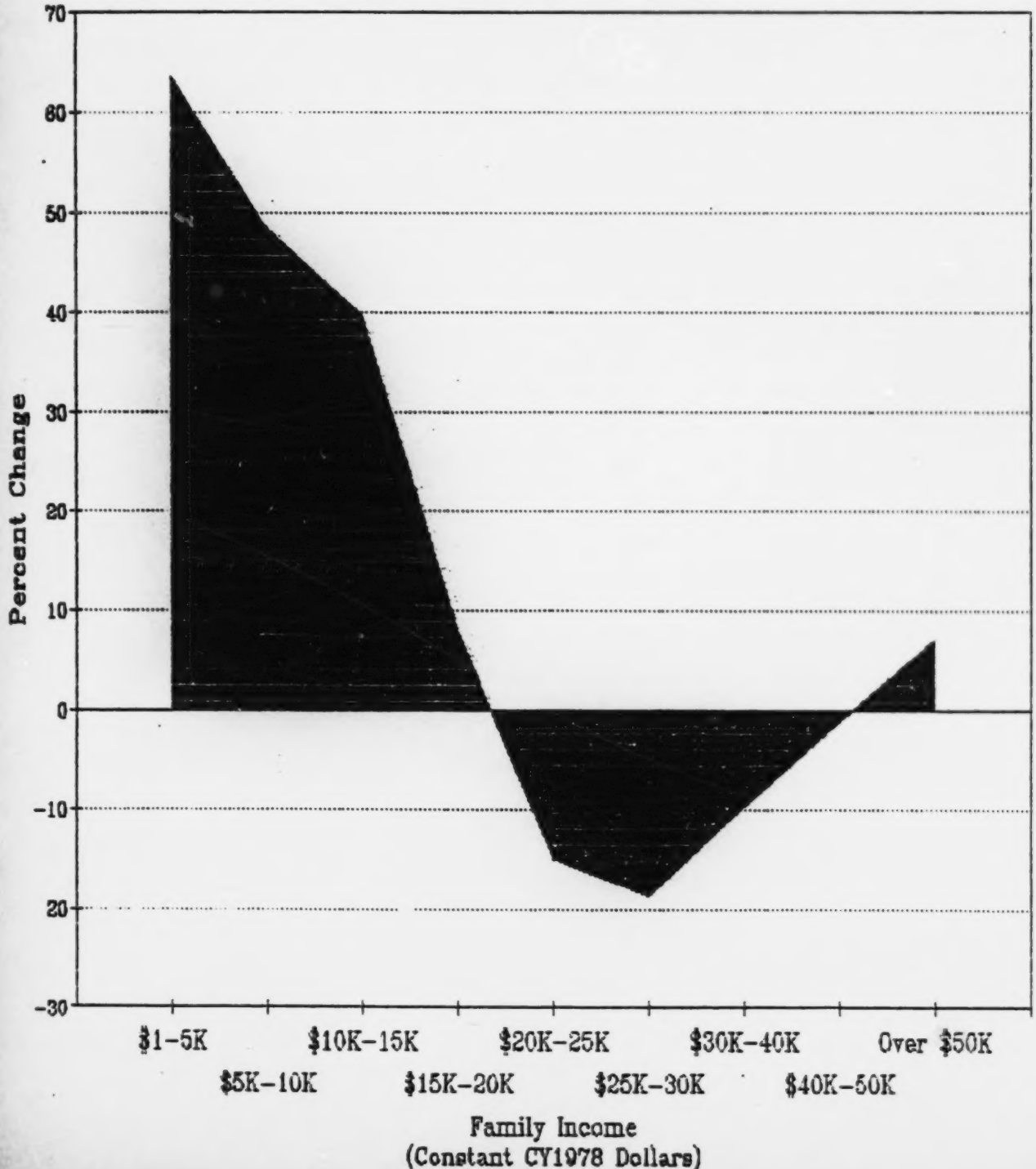


Table 2
Adjusted Family Income Intervals
1979-80 to 1985-86

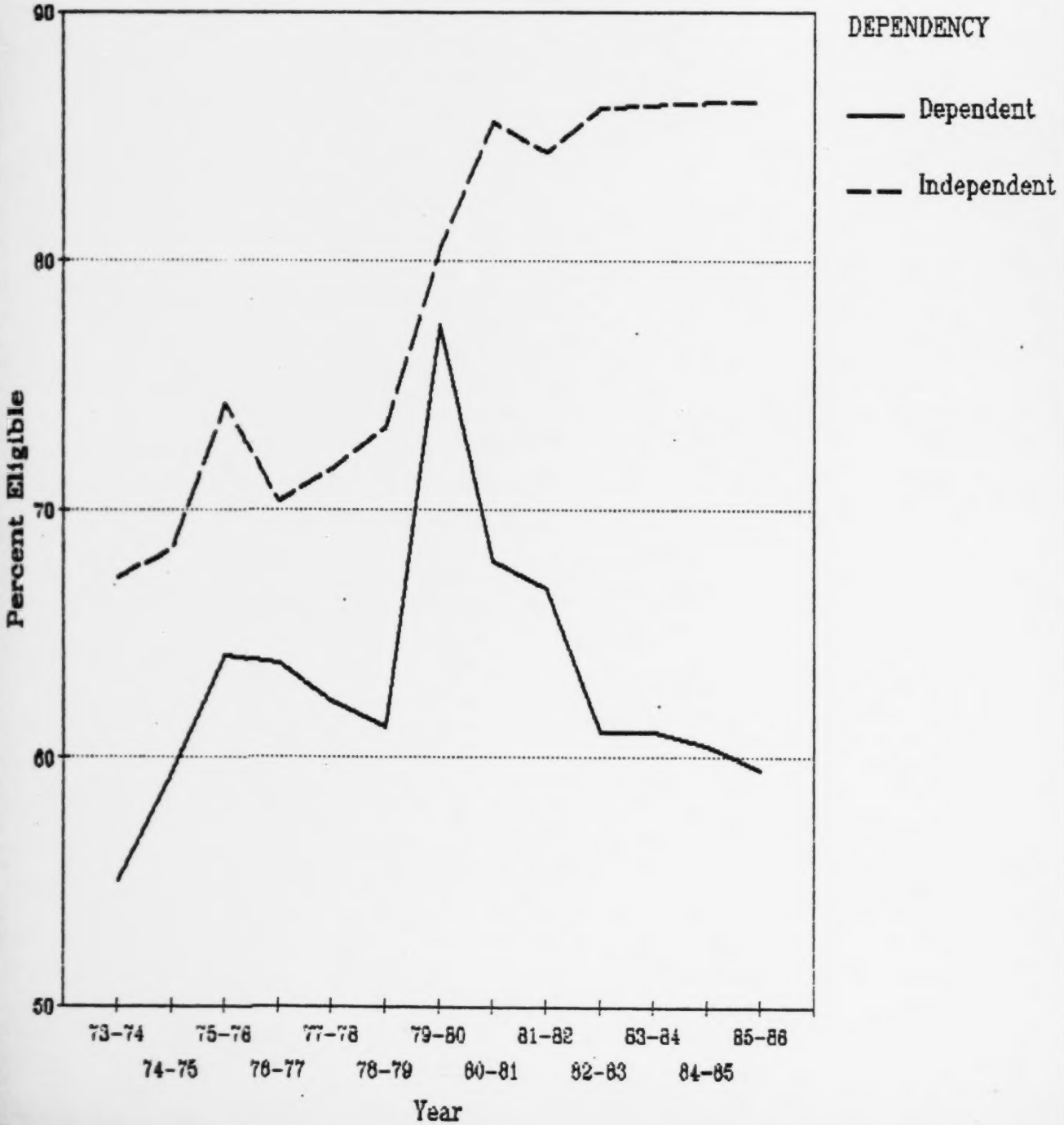
Academic Year>	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
Income Year>	1978	1979	1980	1981	1982	1983	1984
IL Per Cap Income>	$8,795	$9,741	$10,448	$11,609	$11,985	$12,393	$13,802
Income Index>	1.000	1.106	1.186	1.316	1.365	1.407	1.569
Income Range	Adjusted Upper Limit Income						
$0	0	0	0	0	0	0	0
$1-4999	4999	5529	5929	6579	6824	7034	7843
$5000-9999	9999	11,059	11,859	13,159	13,649	14,069	15,688
$10,000-14,999	14,999	16,589	17,789	19,739	20,474	21,104	23,533
$15,000-19,999	19,999	22,119	23,719	26,319	27,299	28,139	31,378
$20,000-24,999	24,999	27,649	29,649	32,899	34,124	35,174	39,223
$25,000-29,999	29,999	33,179	35,579	39,479	40,949	42,209	47,068
$30,000-39,999	39,999	44,239	47,439	52,639	54,599	56,279	62,758
$40,000-49,999	49,999	55,299	59,299	65,799	68,249	70,349	78,448
$50,000 & over							

Middle income families have also suffered in terms of their eligibility for federal Pell and Illinois MAP grants since 1981. Figure 4 compares the proportion of Pell Grant applicants eligible for assistance under the Program's eligibility criteria for the years 1973-74 through 1983-84. Independent Pell Grant applicants have experienced increasing Pell Grant eligibility over the life of Pell. Dependent applicants, in contrast, experienced increased eligibility for the brief life span of the Middle Income Student Assistance Act in 1979-80. Subsequently, MISA was rescinded and middle income Pell applicants were no longer eligible for Pell Grants.

In Illinois, demand for student grants also outstripped the funding provided. Consequently, the Illinois State Scholarship Commission adopted rationing devices, which had the effect of denying state grant eligibility to most middle income dependent grant applicants who had previously qualified for such grants. These rationing devices were similar in intent and effect to those imposed on Pell after MISA. Table 3 shows federal Pell and Illinois MAP grant eligibility for applicants in average-cost Illinois public universities, community colleges and private institutions at the three Bureau of Labor Statistics (BLS) lower, intermediate and high family budget levels since 1978-79.

Thus, since 1980, dependent grant applicants have lost substantial grant assistance funds to help them meet college attendance costs. As shown in Table 3, the largest losses in grant eligibility were sustained by dependents in private colleges and universities. In constant 1985-86 dollars of tuition purchasing power, at the BLS lower family budget level, the largest losses in grant eligibility were at private institutions, down $1753, and public universities, down $1528. At the BLS intermediate family budget level, losses were significant in each sector. At private institutions, dependents lost $1988, at public universities they lost $1510, and at community colleges they lost $1264. At the BLS higher family budget, grant applicants were only eligible for state grant assistance at the BLS higher family budget level. There, between 1979-80 and 1985-86, they lost

FIGURE 4
PELL APPLICANT ELIGIBILITY
BY DEPENDENT/INDEPENDENT STATUS
1973-74 TO 1985-86



Source: U.S. Dept. of Education

$2565 in constant dollar tuition purchasing power. Thus, at all family budget levels, the greatest loss in grant eligibility was sustained by aid applicants in private higher education, followed by public university aid applicants at lower and intermediate budget levels. Community college grant applicants sustained their greatest loss in eligibility at the intermediate family budget level.

Table 3
Pell and MAP Grant Eligibility at BLS Family Budget Levels
By Sector and Year, 1979-80 to 1985-86

		Academic Year 1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	Change in Grnt Eligibility 79-80 to 85-86
BLS Family Budgets[a]									
Income Year		1977	1978	1979	1981	1982	1983	1984	
BLS Lower Family Budget		$10,789	$11,829	$12,885	$15,587	$16,522	$17,053	$17,779	
BLS Intermediate Budget		$17,330	$18,794	$20,564	$25,358	$26,879	$27,744	$28,924	
BLS Higher Family Budget		$25,006	$27,169	$29,890	$37,368	$39,610	$40,884	$42,624	
Public Universities									
Mean Tuition and Fees[b]		$828	$904	$1017	$1156	$1334	$1503	$1612	
Tuition Index (1985-86=1.000)		.514	.561	.631	.717	.828	.932	1.000	
BLS Lower Budget	Pell Grant	$1376	$1238	$1146	$942	$1075	$1150	$1350	- $ 26
	MAP Grant	$828	$904	$1017	$1156	$1393	$1503	$1410	+ $ 582
	Total Grants	$2204	$2146	$2163	$2098	$2468	$2653	$2760	+ $ 556
	Constant $	$4288	$3825	$3428	$2926	$2981	$2847	$2760	- $1528
BLS Intermediate	Pell Grant	$776	$472	$446	0	0	0	0	- $ 776
	MAP Grant	0	$540	0	$240	0	0	0	0
	Total Grants	$776	$1012	$446	$240	0	0	0	- $ 776
	Constant $	$1510	$1804	$707	$335	0	0	0	- $1510
BLS Higher Budget	Pell Grant	0	0	0	0	0	0	0	0
	MAP Grant	0	0	0	0	0	0	0	0
	Total Grants	0	0	0	0	0	0	0	0
	Constant $	0	0	0	0	0	0	0	0
Community Colleges									
Mean Tuition and Fees[b]		$471	$509	$539	$612	$704	$732	$767	
Tuition Index (1985-86=1.000)		.614	.664	.703	.798	.918	.954	1.000	
BLS Lower Budget	Pell Grant	$988	$1012	$932	$942	$1075	$1150	$1350	+ $ 362
	MAP Grant	$471	$509	$539	$617	$420	$420	$300	- $ 171
	Total Grants	$1459	$1521	$1471	$1559	$1495	$1570	$1650	+ $ 191
	Constant $	$2376	$2291	$2092	$1954	$1629	$1646	$1650	- $ 726
BLS Intermediate	Pell Grant	$776	$472	$446	0	0	0	0	- $ 776
	MAP Grant	0	$120	0	0	0	0	0	0
	Total Grants	$776	$592	$446	0	0	0	0	- $ 776
	Constant $	$1264	$892	$634	0	0	0	0	- $1264
BLS Higher Budget	Pell Grant	0	0	0	0	0	0	0	0
	MAP Grant	0	0	0	0	0	0	0	0
	Total Grants	0	0	0	0	0	0	0	0
	Constant $	0	0	0	0	0	0	0	0

		Academic Year							Change in Grnt Eligibility
		1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	79-80 to 85-86
Private Institutions[b]									
Mean Tuition and Fees		$3300	$3689	$4201	$4800	$5089	$5630	$6130	
Tuition Index (1985-86=1.000)		.538	.602	.685	.783	.830	.918	1.000	
BLS Lower Budget	Pell Grant	$1376	$1238	$1146	$942	$1075	$1150	$1350	- $ 26
	MAP Grant	$1800	$1900	$1950	$2000	$2200	$2400	$2800	+ $1000
	Total Grants	$3176	$3138	$3096	$2942	$3275	$3550	$4150	+ $ 974
	Constant $	$5903	$5213	$4520	$3757	$3946	$3867	$4150	- $1753
BLS Intermediate	Pell Grant	$776	$472	$446	0	0	0	0	- $ 776
	MAP Grant	$1800	$1900	$1950	$2000	$2200	$2400	$2800	+ $1000
	Total Grants	$2576	$2372	$2396	$2000	$2200	$2400	$2800	+ $ 224
	Constant $	$4788	$3940	$3498	$2554	$2651	$2614	$2800	- $1988
BLS Higher Budget	Pell Grant	0	0	0	0	0	0	0	0
	MAP Grant	$1380	$1800	$420	0	0	0	0	0
	Total Grants	$1380	$1800	$420	0	0	0	0	- $1380
	Constant $	$2565	$2990	$613	0	0	0	0	- $2565

[a]The Bureau of Labor Statistics family budgets were prepared for a family of four, one employed adult outside of the household. The publication of these budgets was discontinued after 1982. The 1983 and 1984 budgets used here were based on increases in the CPI since 1982.

[b]Tuition and fee averages are weighted means where the weights are undergraduate headcount enrollments.

Changes in Middle Income College Choice

Because the net cost of college for dependent applicants has increased by the amount of their lost Pell and MAP grant eligibilities, the economic theory of student demand for higher education suggests that economically marginal students' enrollment decisions should be affected. The following examines the changing pattern of enrollment choices made by dependent MAP applicants in Illinois between 1979-80 and 1985-86.

This section looks at changes in the "market shares" of Monetary Award Program applicants between three sectors of Illinois higher education between 1979-80 and 1985-86. The three sectors are public universities, community colleges, and private nonprofit institutions. These sectors present differing attendance costs for students. For 1985-86, the ISSC dependent student budget averaged $5068 at public universities, $3967 at community colleges, and $10,254 at private four-year colleges and universities. The market shares are examined at different levels of dependent family income expressed in constant dollars.

A major change in the Illinois Monetary Award Program application process in 1982-83 clouds the interpretation of a portion of the following data. Through 1981-82, Illinois grant applicants applied for state assistance on a form separate from the Pell Grant application. In 1982-83

the state form was dropped, and applicants applied for the state grant on the Pell, ACT or CSS forms by checking a box releasing the data to the Illinois State Scholarship Commission. The combination of two application forms into a single document caused a large increase in the number of very low income dependent applicants for the Illinois Monetary Award Program. Of the approximately 25,000 new dependent applications that appeared in the new system in 1982-83, about 23,000 reported zero family income. Therefore, it appears that the change in application processing that occurred in 1982-83 in Illinois mainly benefited lowest income grant applicants.

Table 4 shows the market shares of dependent grant applicants seeking to enroll in the three sectors of Illinois higher education for the period 1979-80 through 1985-86. Data from this table are graphed in Figures 6 through 11 on the following pages. To illustrate the segment of the grant population served by each sector and changes in market shares of dependent MAP applicants between 1979-80 and 1985-86 in those sectors, each sector is discussed separately following Table 4.

Table 4
Market Shares of Dependent MAP Applicants by Family Income Levels
1979-80 to 1985-86

	Family Income in CY1978 Dollars										
Year	0	$1-$4,999	$5,000 $9,999	$10,000 $14,999	$15,000 $19,999	$20,000 $24,999	$25,000 $29,999	$30,000 $39,999	$40,000 $49,999	$50,000 & over	Total
Public Universities											
1979-80	36.6%	42.4%	43.4%	45.3%	46.1%	45.7%	46.2%	44.6%	41.5%	35.7%	44.6%
1980-81	34.4	41.6	44.6	44.8	45.8	46.3	46.5	45.2	42.6	38.1	44.8
1981-82	31.8	38.7	41.5	43.9	45,5	45.7	45.8	44.5	41.4	35.2	43.4
1982-83	33.6	37.6	39.9	42.1	43.2	44.3	46.3	46.4	44.3	43.6	40.7
1983-84	29.7	37.5	39.1	41.8	43.1	45.1	48.4	49.8	50.7	48.4	40.7
1984-85	32.2	37.3	40.5	42.9	45.7	46.6	49.7	50.1	50.0	44.9	42.0
1985-86	32.4	38.4	41.2	45.1	46.7	50.3	51.6	54.3	49.4	45.1	44.0
Change:	-4.2%	-4.0%	-2.2%	-.2%	+.6%	+4.6%	+5.4%	+9.7%	+7.9%	+9.4%	-.6%
Community Colleges											
1979-80	35.7%	26.7%	25.1%	21.3%	18.9%	14.7%	10.3%	6.7%	3.9%	6.3%	18.2%
1980-81	37.7	27.6	24.5	20.6	18.6	13.7	9.9	5.7	3.9	6.1	17.8
1981-82	40.8	30.4	27.7	22.7	18.8	14.4	9.8	6.0	4.7	7.8	19.3
1982-83	45.0	36.4	32.7	27.8	23.5	17.6	12.1	7.3	4.6	4.4	27.6
1983-84	50.3	37.0	34.6	29.0	24.6	18.4	11.6	7.2	4.0	3.5	28.9
1984-85	45.4	36.3	32.0	27.2	21.5	15.9	10.5	6.4	3.7	2.6	26.9
1985-86	46.0	34.9	30.9	25.4	20.4	13.0	8.8	5.6	3.9	5.7	25.1
Change:	+10.3%	+8.2%	+5.8%	+4.1%	+1.5%	-1.7%	-1.5%	-1.1%	nc	-.6%	+6.9%
Private Institutions											
1979-80	27.7%	30.9%	31.5%	33.4%	35.0%	39.6%	43.5%	48.7%	54.6%	58.0%	37.2%
1980-81	27.9	30.8	30.9	34.6	35.6	40.0	43.6	49.1	53.5	55.8	37.4
1981-82	27.4	30.9	30.8	33.4	35.7	39.9	44.4	49.5	53.9	57.0	37.3
1982-83	21.4	26.0	27.4	30.1	33.3	38.1	41.6	46.3	51.1	52.0	31.7
1983-84	20.0	25.5	26.3	29.2	32.3	36.5	40.0	43.0	45.3	48.1	30.4
1984-85	22.4	26.4	27.5	29.9	32.8	37.5	39.8	43.5	46.3	52.5	31.1
1985-86	21.6	26.7	27.9	29.5	32.9	36.7	39.6	40.1	46.7	49.2	30.9
Change:	-6.1%	-4.2%	-3.6%	-3.9%	-2.1%	-2.9%	-3.9%	-8.6%	-7.9%	-8.8%	-6.3%

Public Universities: Figure 6 shows the public university market share profiles for 1979-80 and 1985-86. In 1979-80, public universities had their largest share of the state grant applicant population in a broad range at the center of the family income ranges shown. By 1985-86, their market share profile had shifted upward. As highlighted in Figure 7, public universities lost market share in lower family income ranges and gained substantially at higher family income levels, particularly above $20,000 (CY1978 dollars).

Community Colleges: Figure 8 shows the Illinois community college market share profiles for 1979-80 and 1985-86. Clearly, community colleges have the largest share of their state grant applicants from the lowest family income ranges. Figure 9 shows how market shares shifted over this time period. The community colleges gained large market shares at family income levels below $20,000, and generally lost market share above this level, although their market share was not large above that level either in 1979-80 or in 1985-86.

Private Institutions: Figure 10 shows the market share profiles for Illinois private colleges and universities in 1979-80 and 1985-86. Clearly, private institutions have a larger share of higher income state grant applicants in both years. Also, the market share profile has shifted downward between these two years. This is highlighted in Figure 11. At all family income levels, private institutions lost market share. At lower family income levels, the loss parallels the loss of public universities. Here community colleges gained; this is largely the result of the change in ISSC application processing that occurred in 1982-83. However, at higher family income ranges, the loss in private institutional market share was to public universities.

The findings here lead to a conclusion that above about $30,000 in CY1978 dollars (or about $47,000 in CY1984 dollars) in family income, there has been a shift in grant applicant market shares from private institutions to public universities. These income ranges correspond to family income ranges where eligibility for federal and state grants has been reduced or eliminated over the same period of time when market shares shifted. While the causal linkage cannot be proven due to the shifting population monitored over this time period, the implication is clear. Loss of grant eligibility probably caused the observed shift in student enrollment from private to public senior institutions.

FIGURE 6
DEPENDENT GRANT APPLICANT MARKET SHARES
IN ILLINOIS PUBLIC UNIVERSITIES
1979-80 AND 1985-86

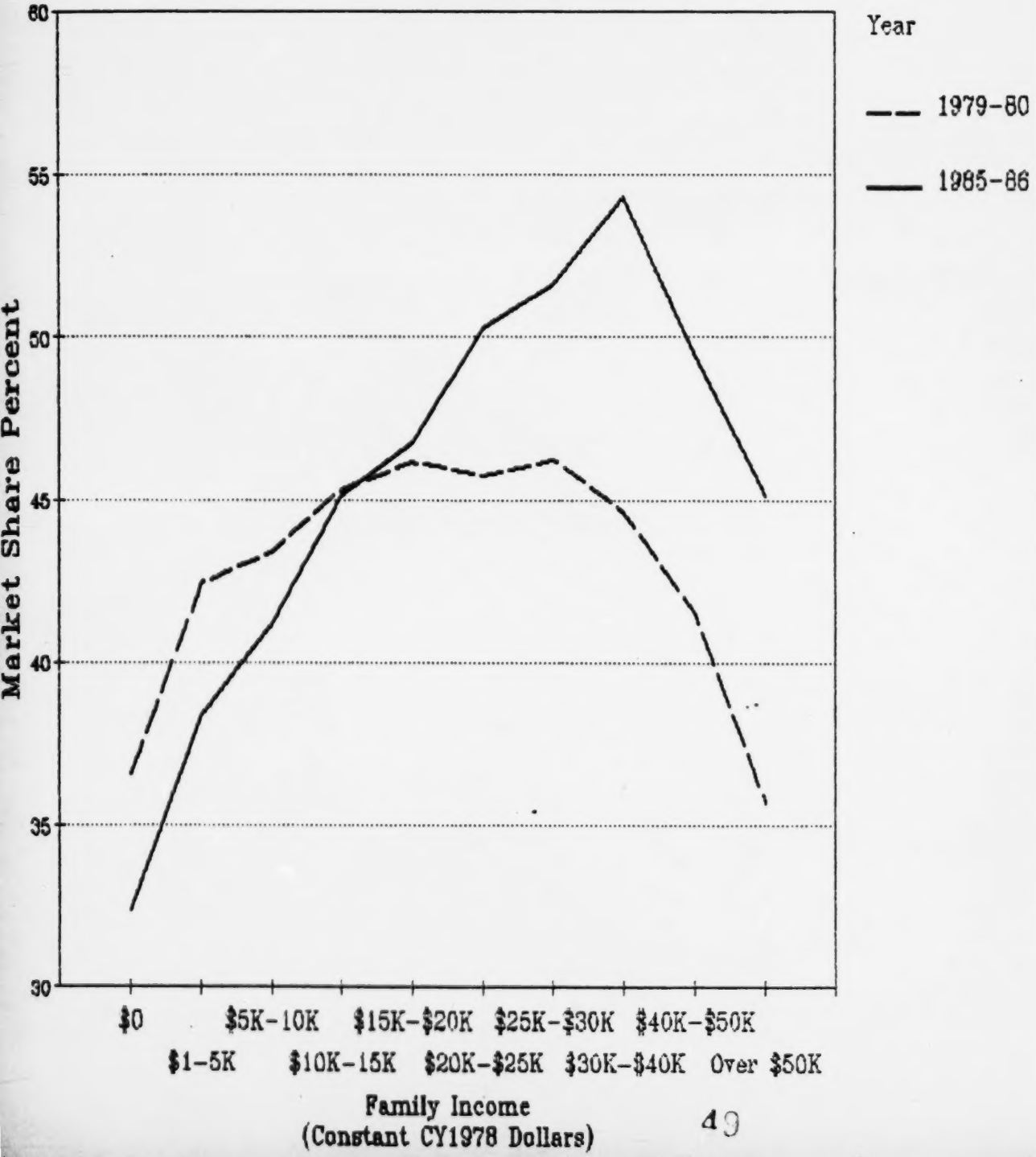


FIGURE 7
CHANGES IN DEPENDENT GRANT APPLICANT
MARKET SHARES IN PUBLIC UNIVERSITIES
1979-80 TO 1985-86

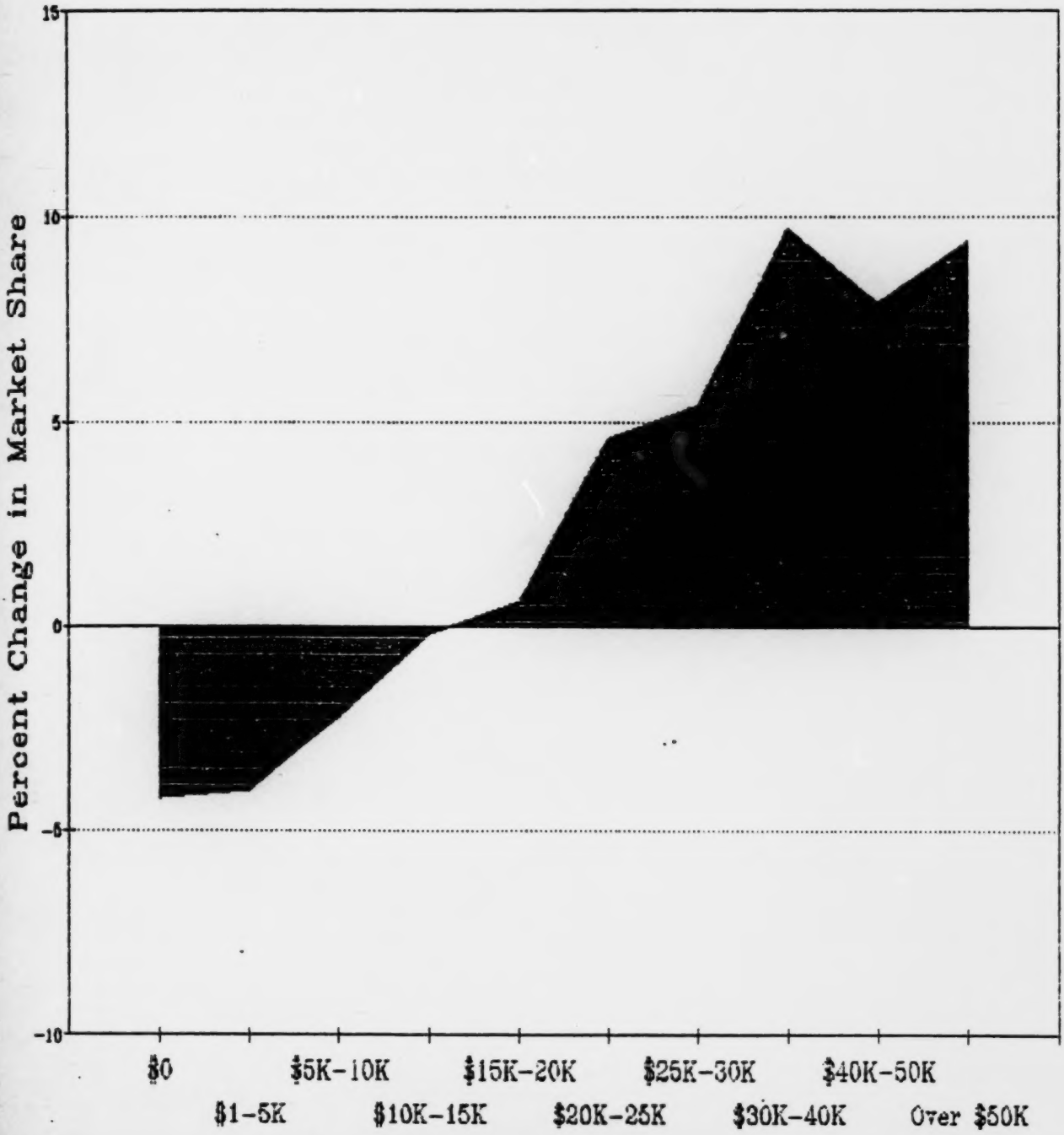


FIGURE 8
DEPENDENT GRANT APPLICANT MARKET SHARES
IN ILLINOIS COMMUNITY COLLEGES
1979-80 AND 1985-86

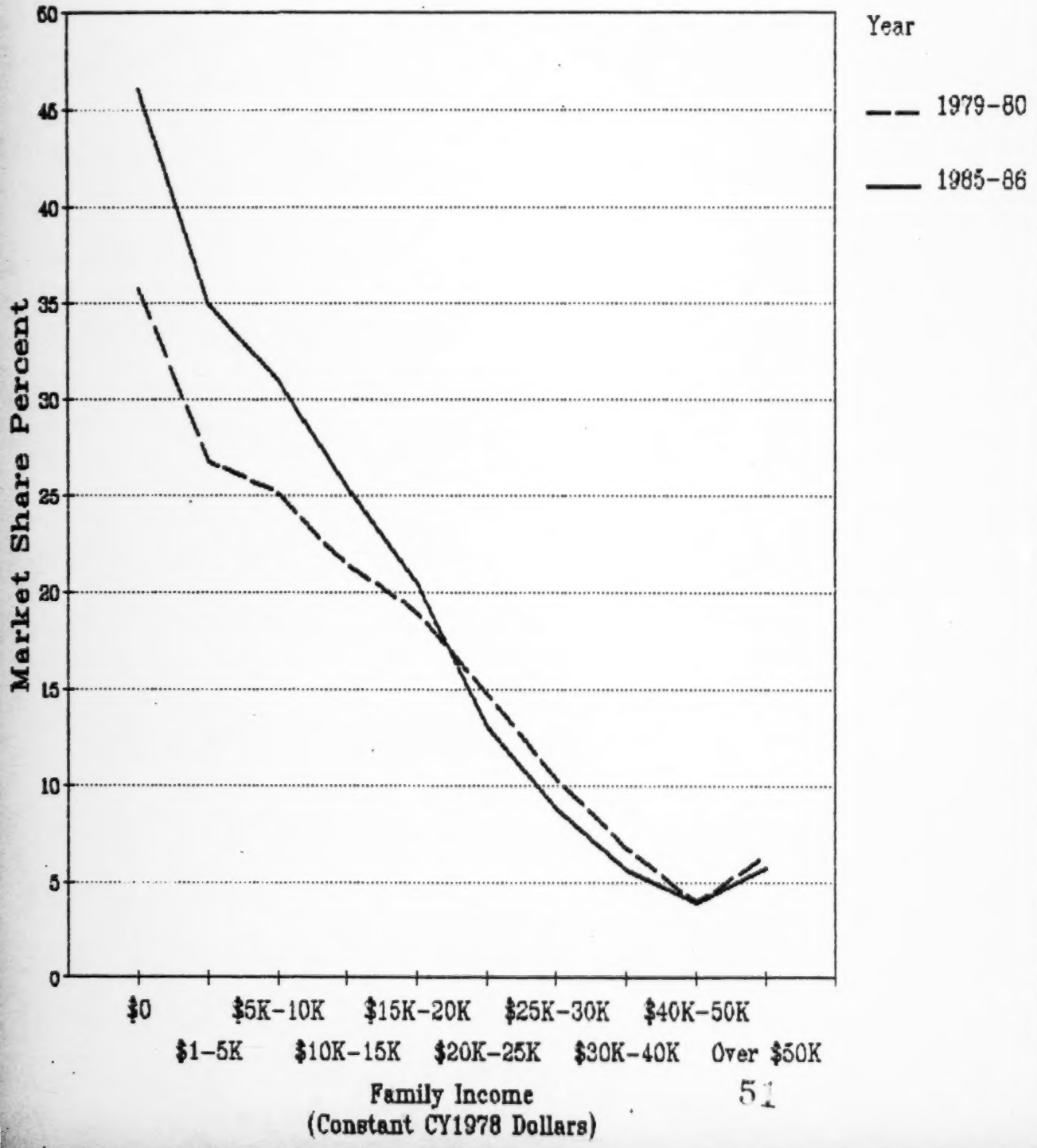


FIGURE 9
CHANGES IN DEPENDENT GRANT APPLICANT MARKET SHARES IN COMMUNITY COLLEGES 1979-80 TO 1985-86

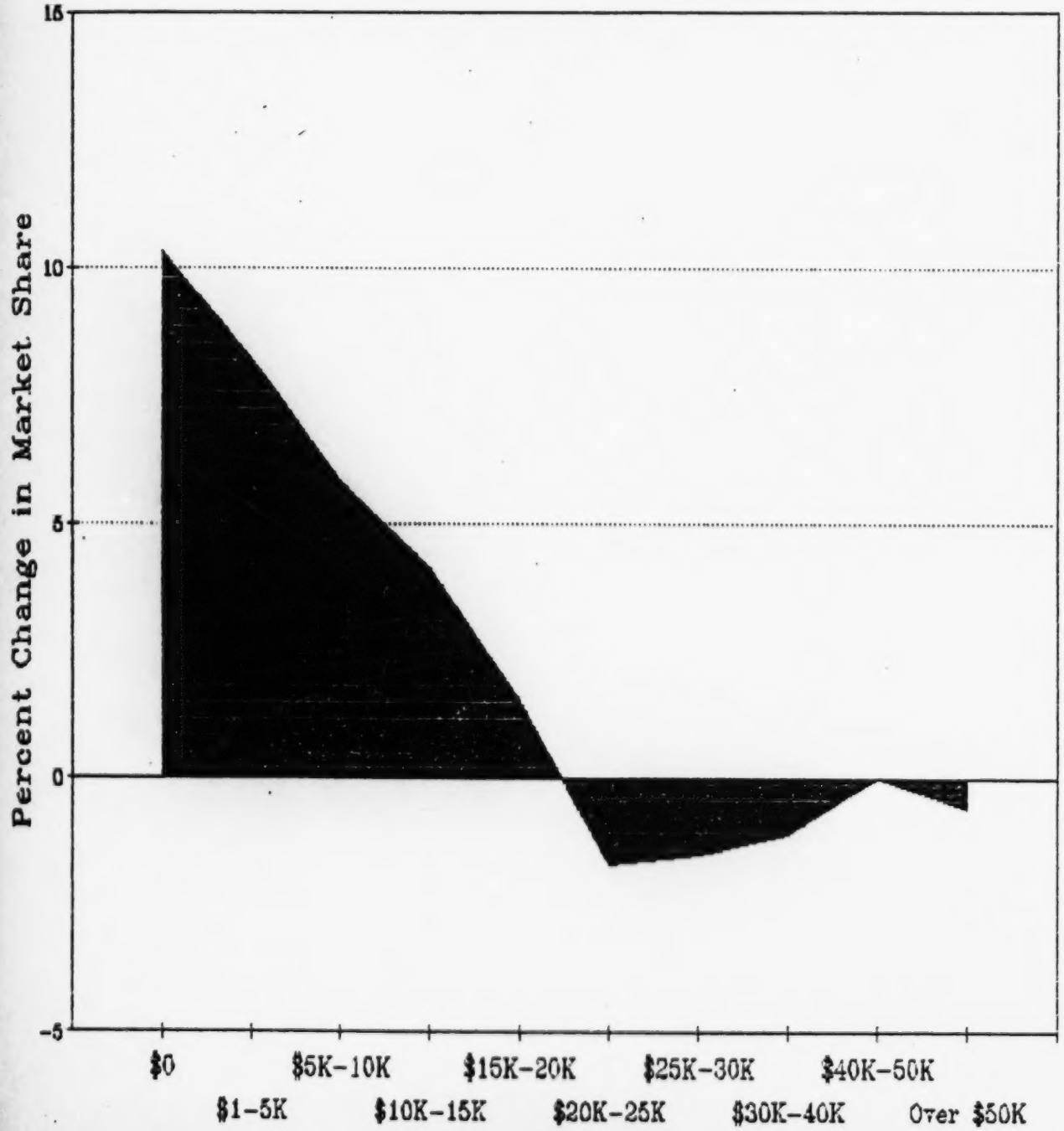


FIGURE 10
DEPENDENT GRANT APPLICANT MARKET SHARES
IN PRIVATE ILLINOIS INSTITUTIONS
1979-80 AND 1985-86

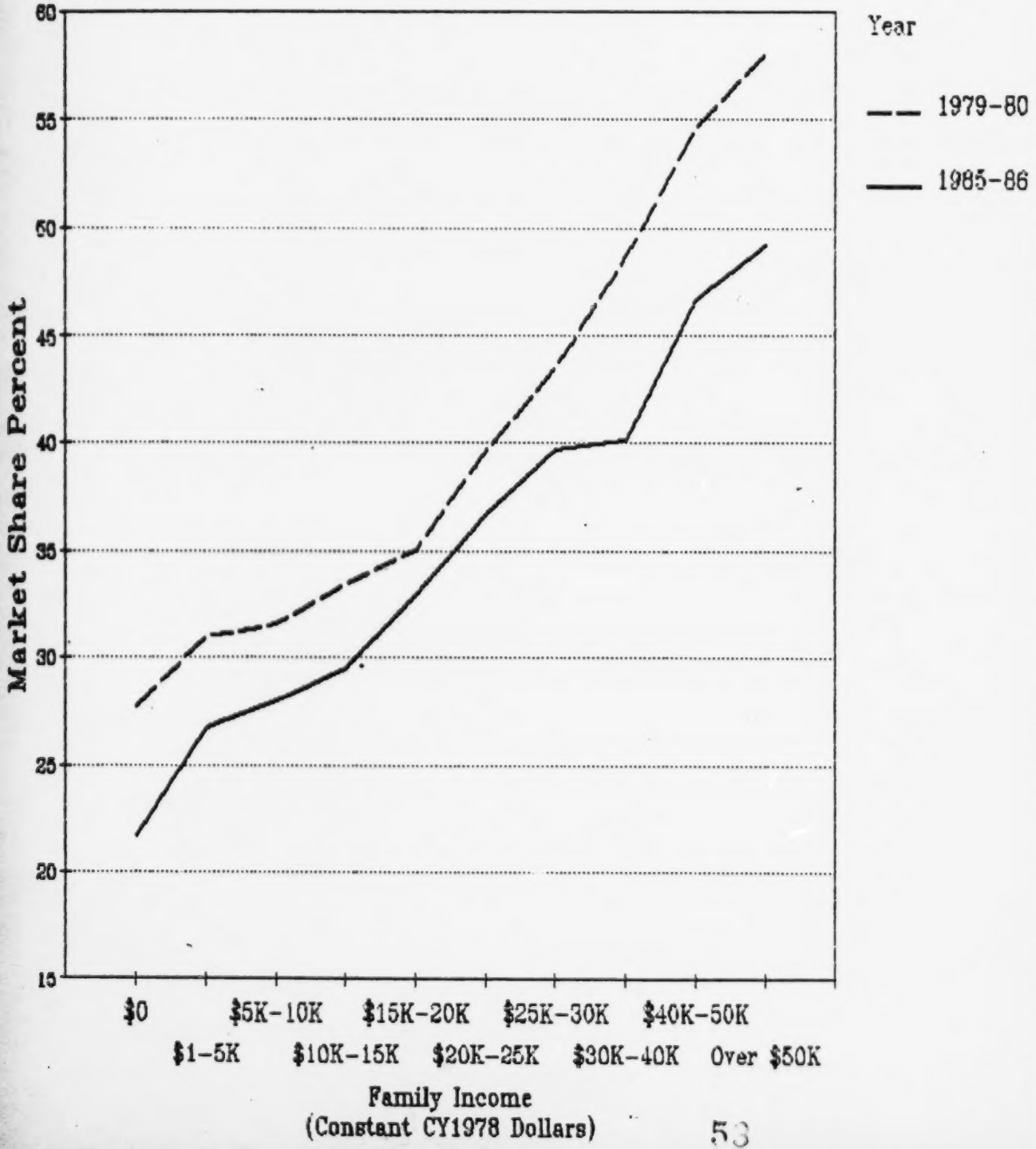
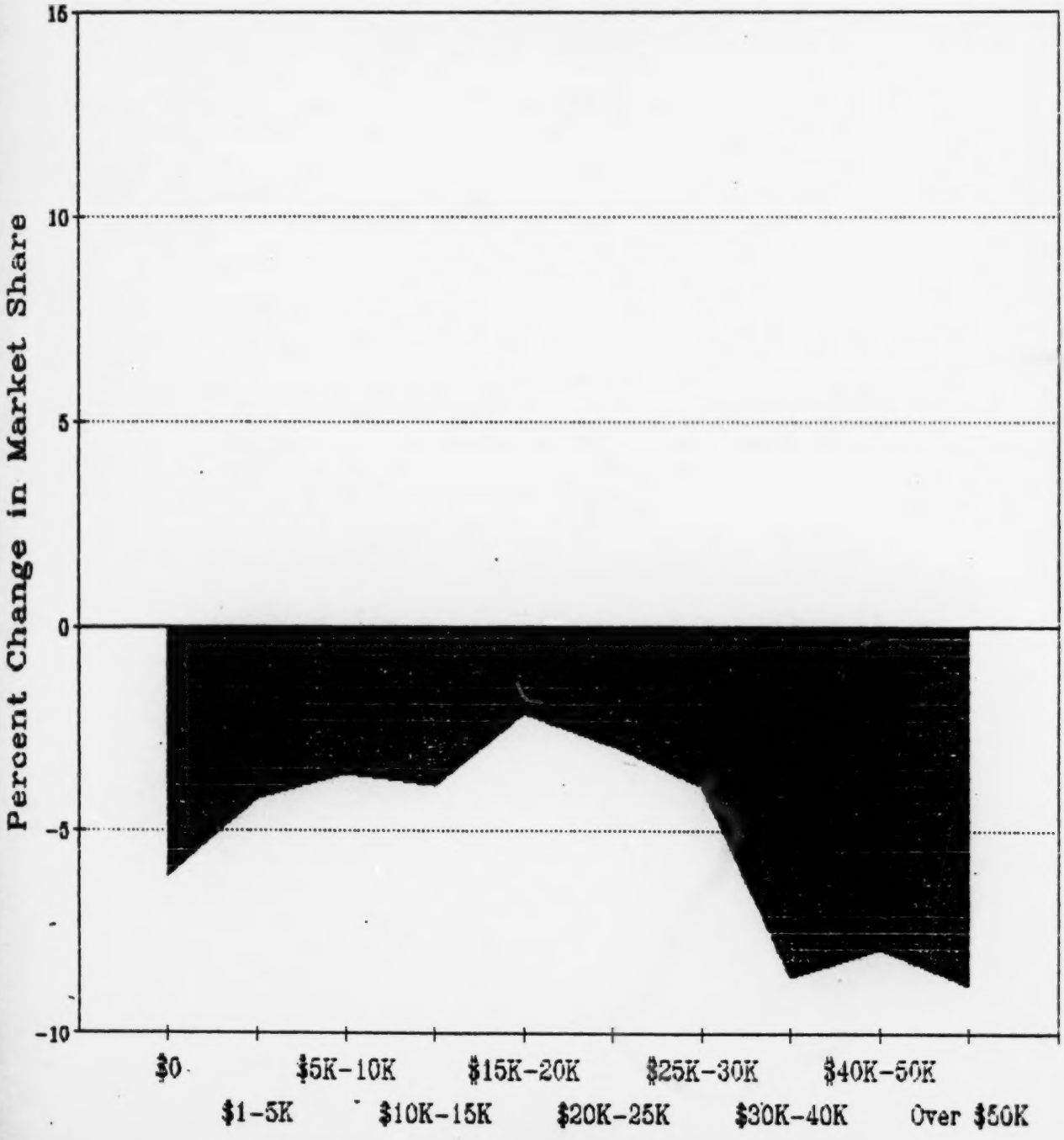


FIGURE 11
CHANGES IN DEPENDENT GRANT APPLICANT MARKET SHARES IN PRIVATE INSTITUTIONS 1979-80 TO 1985-86



Institutional Responses to Changing Aid Levels and Student Enrollments

Public and private colleges in Illinois have responded in a variety of ways to declining student aid eligibility and the enrollment shift that this caused. This section emphasizes the role institutional admissions policies play in achieving or frustrating the aims of student financial aid.

First, the Illinois Student Financial Aid survey has identified institutionally funded grants, particularly in private institutions, as the fastest growing form and source of student financial aid during the 1980s. Since 1972-73, Illinois has surveyed all public and private nonprofit higher educational institutions to determine the amount, form, source, and level of student aid received by students.

Table 5, summarized from the 1979-80 and 1984-85 surveys, shows the dollars received by Illinois undergraduates. Of the programs by institutional sector that increased 10 million dollars or more over this five year period, the largest rates of increase were in institutionally funded grants and in tuition waivers, both in private institutions. These are the institutions that, as a group, have fared least well in the major grant programs of Pell and MAP. Because private institutions are more dependent on financial aid to enable students to pay the higher private college tuitions, these institutions have responded to the diminished federal and state grant programs through expanded financial aid awards from institutional resources.

Table 5
Growth in Undergraduate Gift Assistance in Illinois
by Source, Program and Sector (4)
1979-80 and 1984-85

(Dollars in Millions)

Source	Program/Sector	1979-80	1984-85	Increase Dollars	Increase Percent
	All Gift Assistance*	$ 248.1	$ 374.2	$ 126.1	51%
	Public Universities	73.9	107.4	33.5	45%
	Community Colleges	41.9	67.7	25.8	62%
	Private Institutions	132.3	199.1	66.8	50%
Federal	Pell Grants	90.8	116.4	25.6	38%
	Public Universities	34.6	43.0	8.4	24%
	Community Colleges	21.7	39.7	18.0	83%
	Private Institutions	34.5	33.6	(.9)	(.9%)
	Other Federal Grants	17.6	22.8	5.2	30%
Illinois	Monetary Award Program	83.3	109.7	26.4	32%
	Public Universities	19.8	31.9	12.1	61%
	Community Colleges	8.2	12.4	4.2	51%
	Private Institutions	55.3	65.4	10.1	18%
	Other State Grant Programs	12.5	13.9	1.4	11%
Institution	Institutional Grants	22.9	66.5	43.6	190%
	Public Universities	2.3	4.5	2.2	96%
	Community Colleges	.2	.6	.4	200%
	Private Institutions	20.4	61.4	41.0	201%
	Institutional Waivers	12.7	27.9	15.2	120%
	Public Universities	3.9	5.2	1.3	33%
	Community Colleges	.4	3.8	3.4	850%
	Private Institutions	8.0	18.9	10.9	136%
Private	Private Scholarships	8.2	16.9	8.7	106%
	Public Universities	2.9	7.3	4.4	152%
	Community Colleges	.9	1.9	1.0	111%
	Private Institutions	4.4	7.7	3.3	75%

*Gift assistance includes scholarships, grants, and tuition waivers. Not included are student loans and earnings from campus employment.

A second consequence of declining student financial aid for dependent students appears to be loss of at least choice and perhaps access for black undergraduate students in Illinois. In particular, there has been a loss of black undergraduate enrollments in Illinois senior institutions, particularly several public universities, and an increase in black enrollments in Illinois community colleges, during the period of declining dependent grant eligibility since 1980.

Table 6 shows the racial composition of undergraduate enrollments in Illinois higher education and its distribution by sector since 1979-80. For both black and Hispanic enrollments, the shares enrolled in senior institutions have declined steadily since 1979-80 while the proportion enrolled in community colleges has steadily increased. Apparently, minority enrollments are migrating toward the lowest priced higher educational alternatives available in Illinois.

Table 6
Illinois Undergraduate Enrollments by Race and Distribution by Sector
1979-80 to 1985-86

	Academic Year						
Racial/Ethnic Group	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
White, Non-Hispanic	381,094	426,119	444,725	463,368	450,293	440,683	425,730
Public Universities	29.6%	27.0%	25.9%	24.8%	25.0%	25.5%	26.7%
Community Colleges	51.8	54.4	58.0	58.3	57.4	56.6	54.9
Private Institutions	18.6	18.6	16.1	17.0	17.6	17.9	18.4
Black, Non-Hispanic	77,084	83,839	91,524	91,192	80,497	90,514	84,734
Public Universities	22.5%	20.5%	18.5%	18.3%	20.4%	17.9%	19.3%
Community Colleges	62.0	66.5	68.1	70.0	66.2	70.0	67.2
Private Institutions	15.5	13.0	13.4	11.7	13.4	12.1	13.5
Hispanic	19,691	25,093	28,564	28,524	24,867	29,557	30,144
Public Universities	18.2%	15.1%	13.7%	13.8%	15.9%	13.6%	14.0%
Community Colleges	69.4	73.6	72.5	71.5	66.3	71.3	70.5
Private Institutions	12.4	11.3	13.8	14.8	17.8	15.2	15.5
Asian, Pacific Island	9,768	14,012	16,413	16,826	16,292	18,526	18,874
Public Universities	28.6%	23.7%	23.3%	25.5%	27.7%	26.1%	28.1%
Community Colleges	54.8	60.8	62.7	59.4	56.4	57.5	54.1
Private Institutions	16.6	15.5	14.1	15.1	15.9	16.3	17.8
American Indian	2,879	4,557	3,290	2,651	2,063	2,110	1,914
Public Universities	13.9%	9.4%	12.1%	16.8%	17.9%	16.0%	15.4%
Community Colleges	79.2	87.0	81.9	75.3	71.2	69.7	73.5
Private Institutions	6.8	3.6	6.0	7.9	10.9	14.3	11.1
Other, No Indication	70,881	59,574	60,111	39,020	34,454	29,029	29,231
Public Universities	9.9%	14.2%	15.2%	24.2%	24.7%	25.0%	24.2%
Community Colleges	80.7	68.3	57.0	55.5	51.6	53.2	55.2
Private Institutions	9.4	17.5	27.8	20.3	23.7	21.8	20.6
TOTAL	561,397	613,194	644,627	641,581	608,466	610,419	590,627
Public Universities	25.7%	24.2%	23.2%	23.3%	24.1%	23.8%	24.9%
Community Colleges	57.7	58.6	60.2	60.4	58.6	59.2	57.5
Private Institutions	16.7	17.3	16.6	16.2	17.3	17.1	17.6

Case Study: The University of Illinois

The University of Illinois presents a useful illustration of the themes developed in this paper. The University has two campuses. The senior campus

is located at Champaign/Urbana and has an enrollment of about 29,000 undergraduates. The mean ACT composite score for freshmen entering there in the fall of 1985 was 26.3. The second, newer campus is in Chicago and has about 17,000 enrolled undergraduates. The mean ACT composite score for freshmen entering there in the fall of 1985 was 20.1.

In response to a request from the University of Illinois, dependent MAP Grant market shares were calculated for each campus for the years 1979-80, 1982-83, and 1985-86. The results for the Champaign/Urbana Campus are shown in Figure 12. The results are consistent for all three years and show a relative emphasis on higher income grant applicants. The Champaign/Urbana Campus market shares are lowest at lower dependent aid applicant family income levels and highest at the highest family income levels. Figure 13 shows the change in dependent grant applicant market shares for the Champaign/Urbana Campus between 1979-80 and 1985-86. While market shares increased at all family income levels, the largest gains were recorded at family income levels above $30,000 in 1978 dollars or $47,000 in 1984 dollars. This represents the income ranges where grant eligibility loss in private colleges and universities was greatest between 1979-80 and 1985-86 as shown in Table 3, page 10.

The comparable results for the Chicago Campus of the University of Illinois are shown in Figures 14 and 15. The market shares of dependent grant applicants at the Chicago Campus in Figure 14 show a relatively larger share of lower income grant applicants, relatively smaller share of higher income grant applicants, and quite consistent market share profiles for all three years. Figure 15 shows the change in market shares between 1979-80 and 1985-86. The Chicago Campus lost significant market share at lower income levels of grant applicants and, for all practical purposes, did not gain any market share. Inquiry into the causes of the loss in lower income market share found that admissions standards were increased substantially during this period. The mean ACT Composite test score for entering freshmen classes at the Chicago Campus were as follows:

1980	18.1
1981	18.1
1982	19.5
1983	20.6
1984	20.1
1985	20.1

Apparently, the higher admissions standards resulted in the loss in market share of low income grant applicants. However, this loss was not offset by a gain in higher income grant applicants. Only MAP applicant loss resulted.

The enrollment consequences for blacks at the Chicago Campus of the University of Illinois due to the change in admissions policies are shown in Table 7. As a proportion of total enrollments, blacks declined from 16.7% to 11.2%, despite the location of this campus in the center of the state's minority population.

FIGURE 12
DEPENDENT GRANT APPLICANT MARKET SHARES
AT CHAMPAIGN/URBANA CAMPUS, UNIVERSITY OF ILLINOIS
1979-80, 1982-83 AND 1985-86

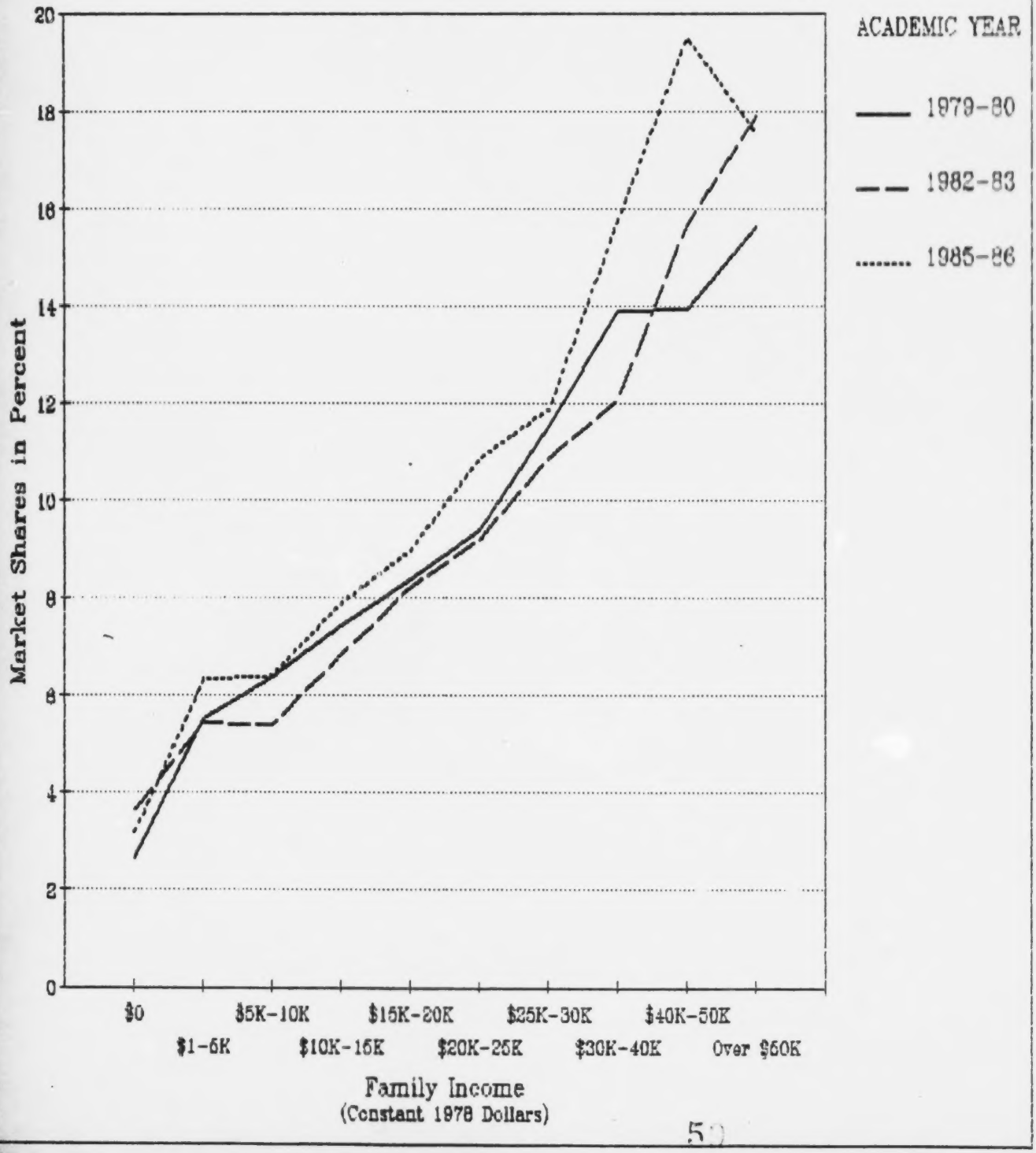


FIGURE 13
CHANGES IN MARKET SHARES OF DEPENDENT MAP APPLICANTS AT CHAMPAIGN/URBANA CAMPUS, UNIVERSITY OF ILLINOIS BETWEEN 1979-80 AND 1985-86

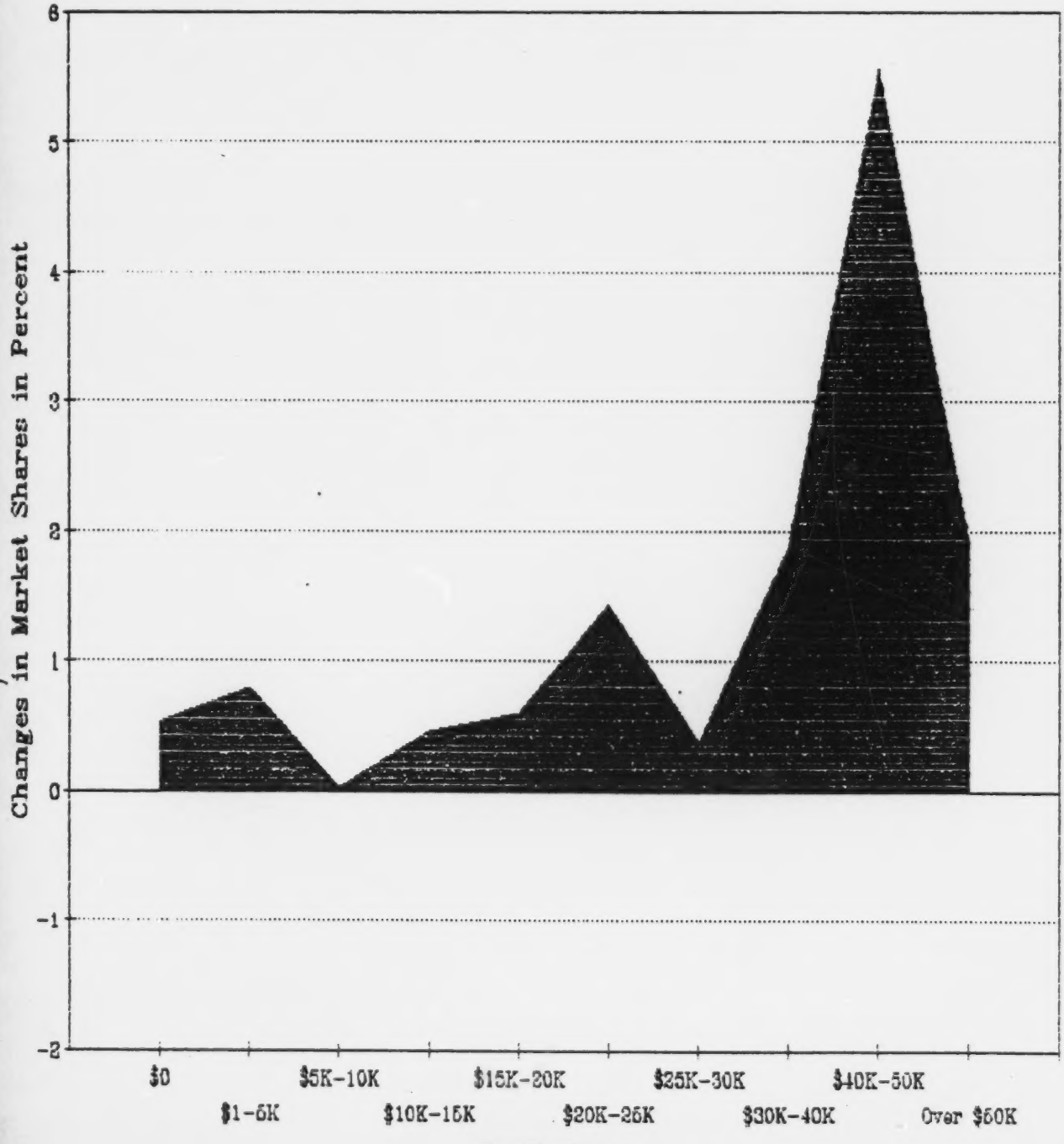


FIGURE 14
DEPENDENT GRANT APPLICANT MARKET SHARES
AT CHICAGO CAMPUS, UNIVERSITY OF ILLINOIS
1979-80, 1982-83 AND 1985-86

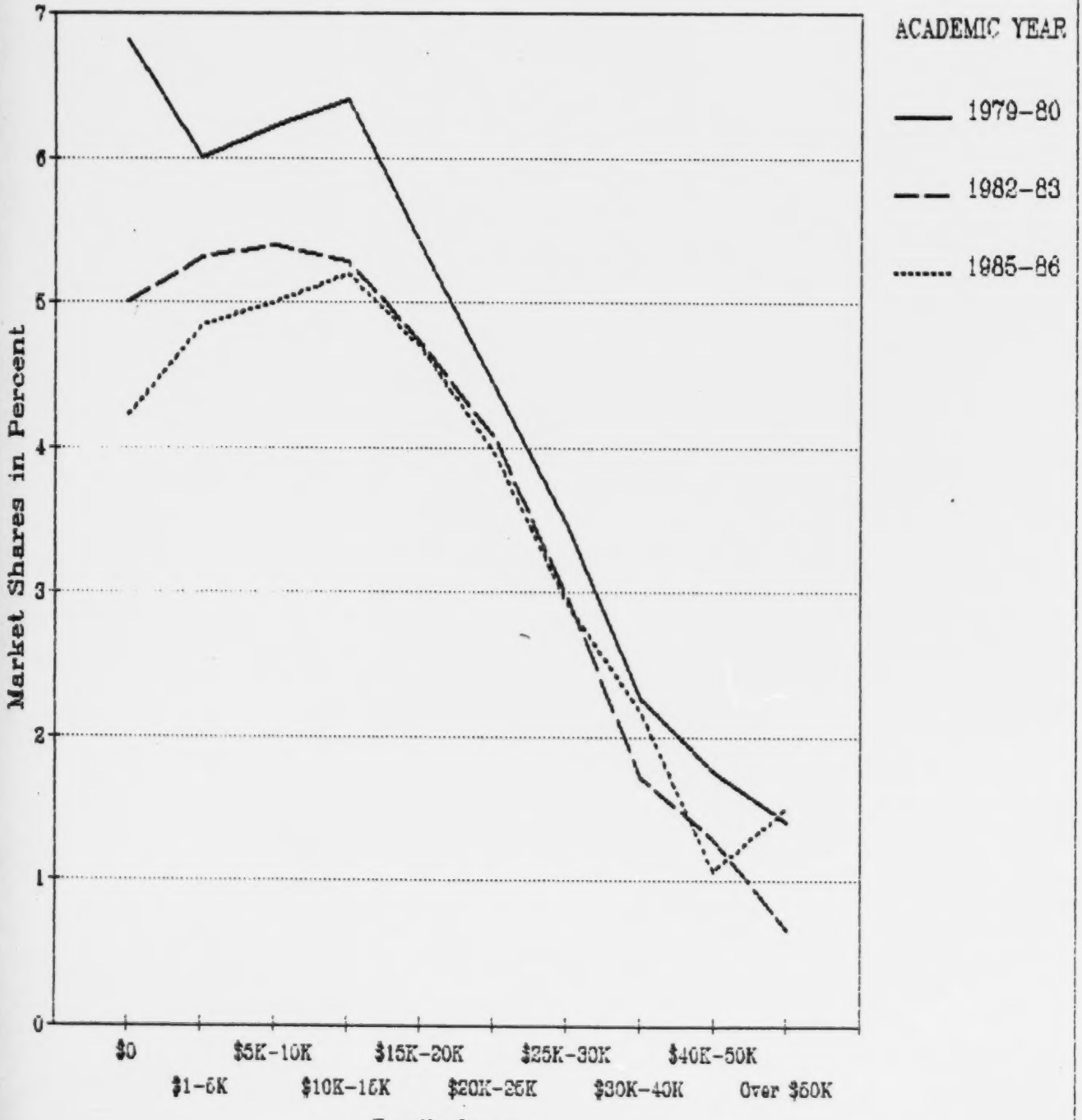


FIGURE 15
CHANGES IN MARKET SHARES OF DEPENDENT MAP APPLICANTS AT CHICAGO CAMPUS, UNIVERSITY OF ILLINOIS BETWEEN 1979-80 AND 1985-86

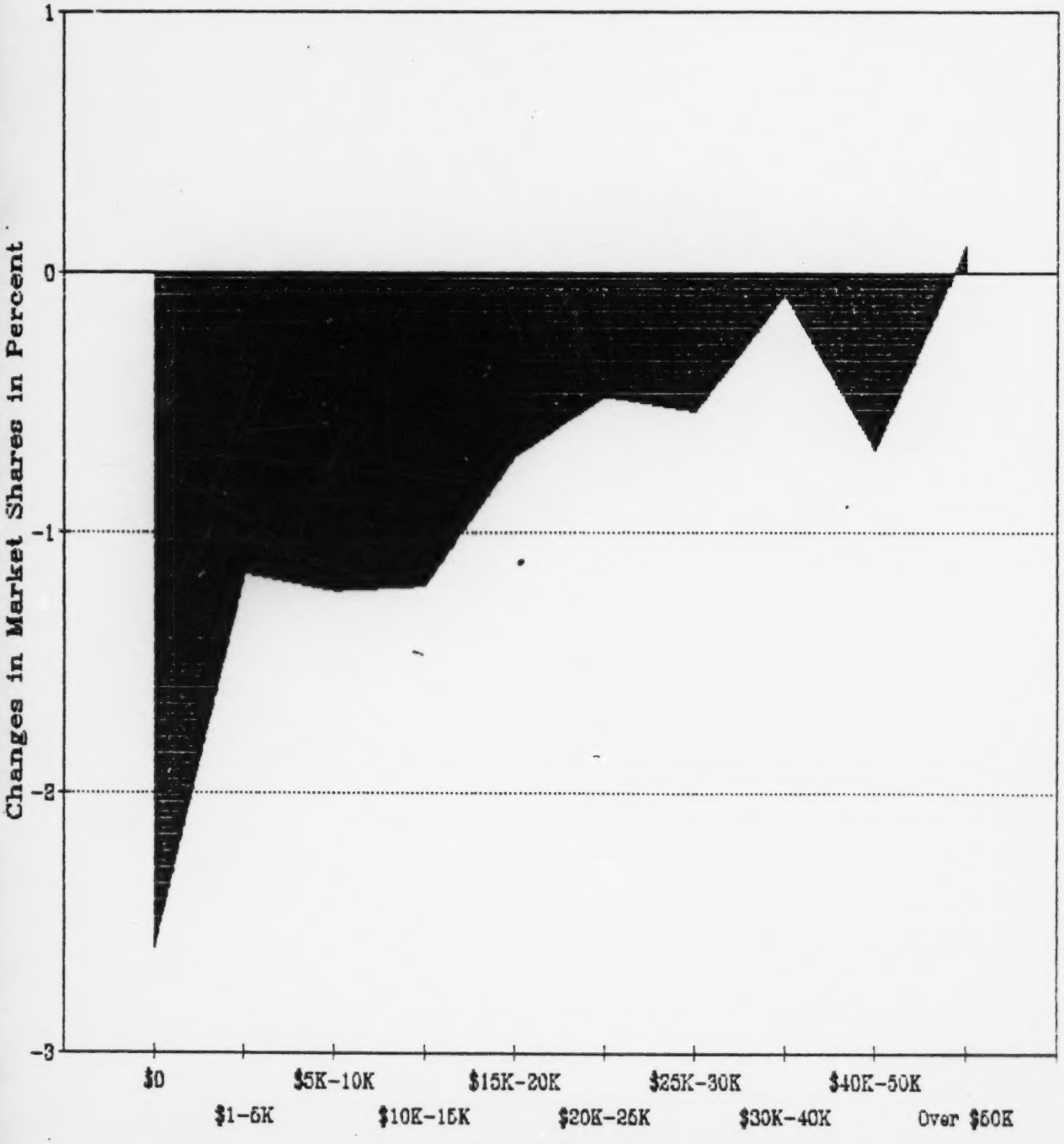


Table 7
University of Illinois/Chicago Undergraduate Enrollments by Race
1980 to 1985

Racial/Ethnic Category		Fall of: 1980	1981	1982	1983	1984	1985
White, Non-Hispanic	N	11,913	11,511	11,766	11,334	11,321	10,986
	%	61.8	61.9	62.6	65.4	65.0	63.9
Black, Non-Hispanic	N	3228	2867	2676	2062	1956	1928
	%	16.7	15.4	14.2	11.9	11.2	11.2
Hispanic	N	1599	1574	1532	1414	1454	1480
	%	8.1	8.5	8.2	8.2	8.4	8.6
Asian, Pacific Islander	N	1331	1524	1717	1697	1869	2003
	%	6.9	8.2	9.1	9.8	10.7	11.6
American Indian, Alaskan Native	N	83	75	87	83	81	69
	%	.4	.4	.5	.5	.5	.4
Other, No Indication	N	1118	1056	1012	749	727	735
	%	5.8	5.7	5.4	4.3	4.2	4.3
Total		19,272	18,607	18,790	17,339	17,408	17,201

Finally, Figure 16 shows the change in combined campus market shares of dependent grant applicants between 1979-80 and 1985-86. The results show a loss in lowest income grant applicant market share (due to Chicago) and a gain in highest income grant applicant market share (due to Champaign/Urbana). This figure is consistent with Figure 7. It shows, in a specific way, the shift in dependent grant applicants between sectors of Illinois higher education. Higher income aid applicants moved toward the University of Illinois, while lower income aid applicants moved away or were excluded.

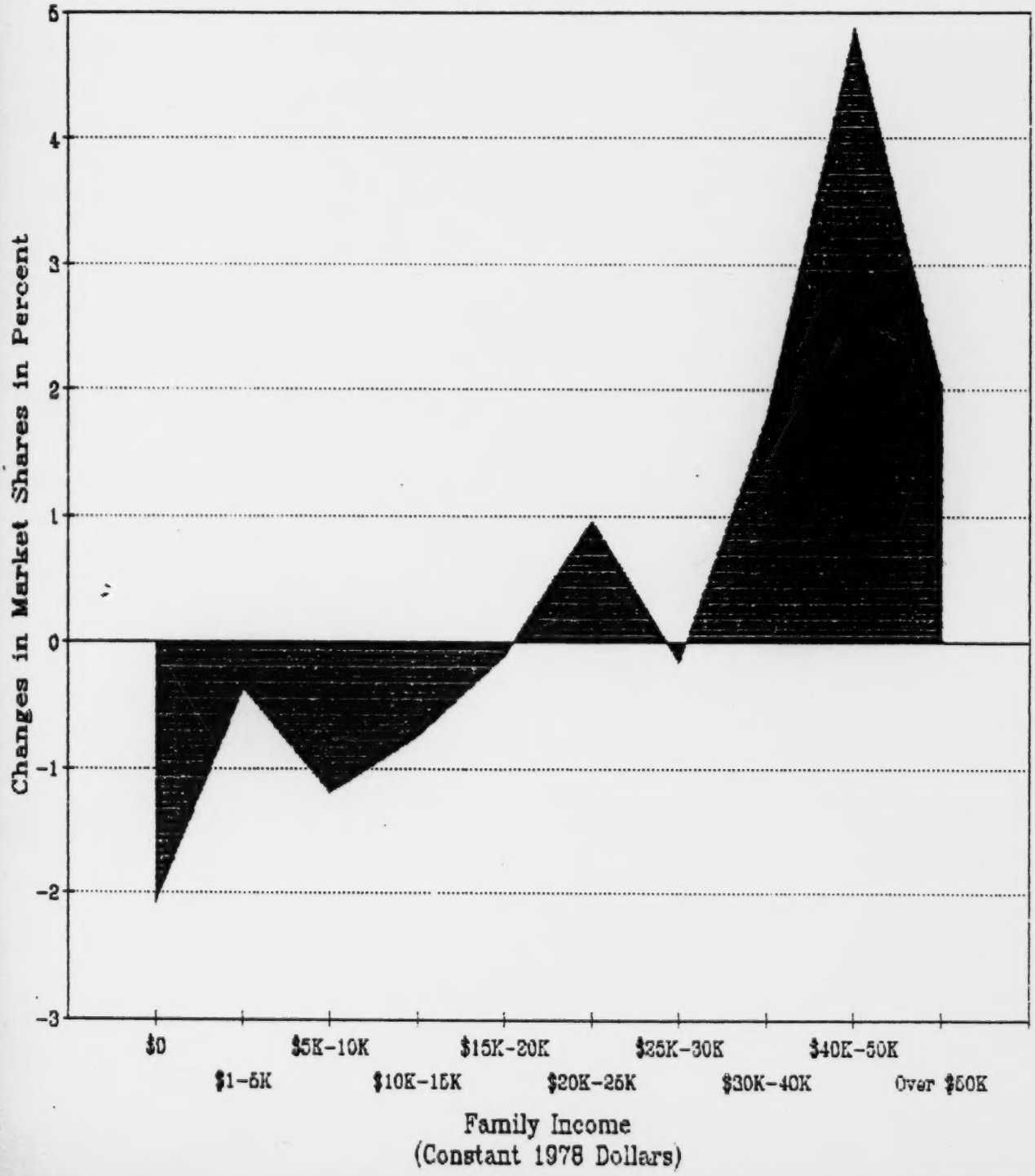
Summary and Discussion

This paper sought to identify enrollment consequences and institutional responses to the significant deterioration in federal Pell Grant and Illinois MAP Grant funding that has occurred for Illinois undergraduates since 1979-80. Findings from this analysis are discussed below.

First, on a constant dollar per grant applicant basis, federal and state grant assistance declined from covering about 96% of average tuition and fees in 1980-81 to 53% by 1982-83. It has remained near that level since then. This decline occurred because increases in application volume and college costs were not fully funded by either the federal or state governments during this period. The problem of underfunding, however, has been made worse by the very large, unfunded increase in very low income aid applicants during this same period, particularly in the state grant program applicant population.

Second, both the federal and state governments chose to ration dependent

FIGURE 16
CHANGES IN MARKET SHARES OF DEPENDENT MAP APPLICANTS AT BOTH CAMPUSES OF THE UNIVERSITY OF ILLINOIS 1979-80 AND 1985-86



aid applicant grant eligibility in order to preserve limited funds for lowest income grant applicants. This occurred when the middle income portion of the population was shrinking due to economic changes occurring in the larger economy. Thus, middle income families were twice buffeted.

Third, some grant applicants with family incomes near and above median levels have switched their college choices from private colleges to public universities.

Fourth, private institutions have made extraordinary efforts to offset the loss in federal and state grant funding with major increases in institutionally financed grant assistance programs. These efforts certainly stemmed some of the loss that could have occurred in dependent enrollments if private institutions had not responded as they did.

Finally, there appears to have been a shift in minority enrollments from public and private senior institutions to community colleges in Illinois, without enrollment loss to the senior institutions. Thus, the protected classes under rationed grant eligibility lost enrollment choice in spite of this protection, apparently as a result of changed admissions policies and practices in the senior institutions. Several Illinois public universities, in particular, appear to have used the enrollment influx of dependent students from private colleges and universities to relax efforts to attract black and Hispanic undergraduate enrollments.

Despite these conclusions, more work remains to be done to study the enrollment consequences from underfunding need-based student grant programs. This analysis has suffered from limitations of a data base that was altered in important characteristics during the time period under study. More important, however, is the omission of family financial data on enrolled students who were not applicants for grant assistance. Thus, the most comprehensive view of middle income student choice is not possible under the limitations of grant applicant record analysis. Additional data bases, more comprehensive in scope, must be explored to more fully answer questions of middle income choice. The UCLA data on national college freshmen offer one such resource for a national study. Further study of such data bases will likely offer additional insight into enrollment shifts suggested in this paper.

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(1) Thurow, Lester C., "A General Tendency Toward Inequality," American Economics Association, December 1985 (unpublished).

(2) Astin, Alexander W., Kenneth C. Green, William S. Korn, and Mary Jane Maier, The American Freshman: National Norms For Fall 1983, Cooperative Institutional Research Program, American Council on Education, University of California Los Angeles, December 1983, p. 4.

(3) Mortenson, Thomas G., "Pell Applicants," in Report and Papers, Second Annual NASSGP/NCHELP Research Conference, May 31-June 1, 1985, Washington, D.C., Illinois State Scholarship Commission, July 1985, pp. 35-57.

(4) State of Illinois Board of Higher Education and State Scholarship Commission, Illinois Student Financial Aid, FY1985, April 1986, Tables 34, 35, 41, 42, 48, 49, 52 and 53.

An Exploratory Study of the Relationship between College and University Selectivity and Other Institutional and Personal Variables among 1971 Freshmen Who Had Graduated from the Same Institution by 1980

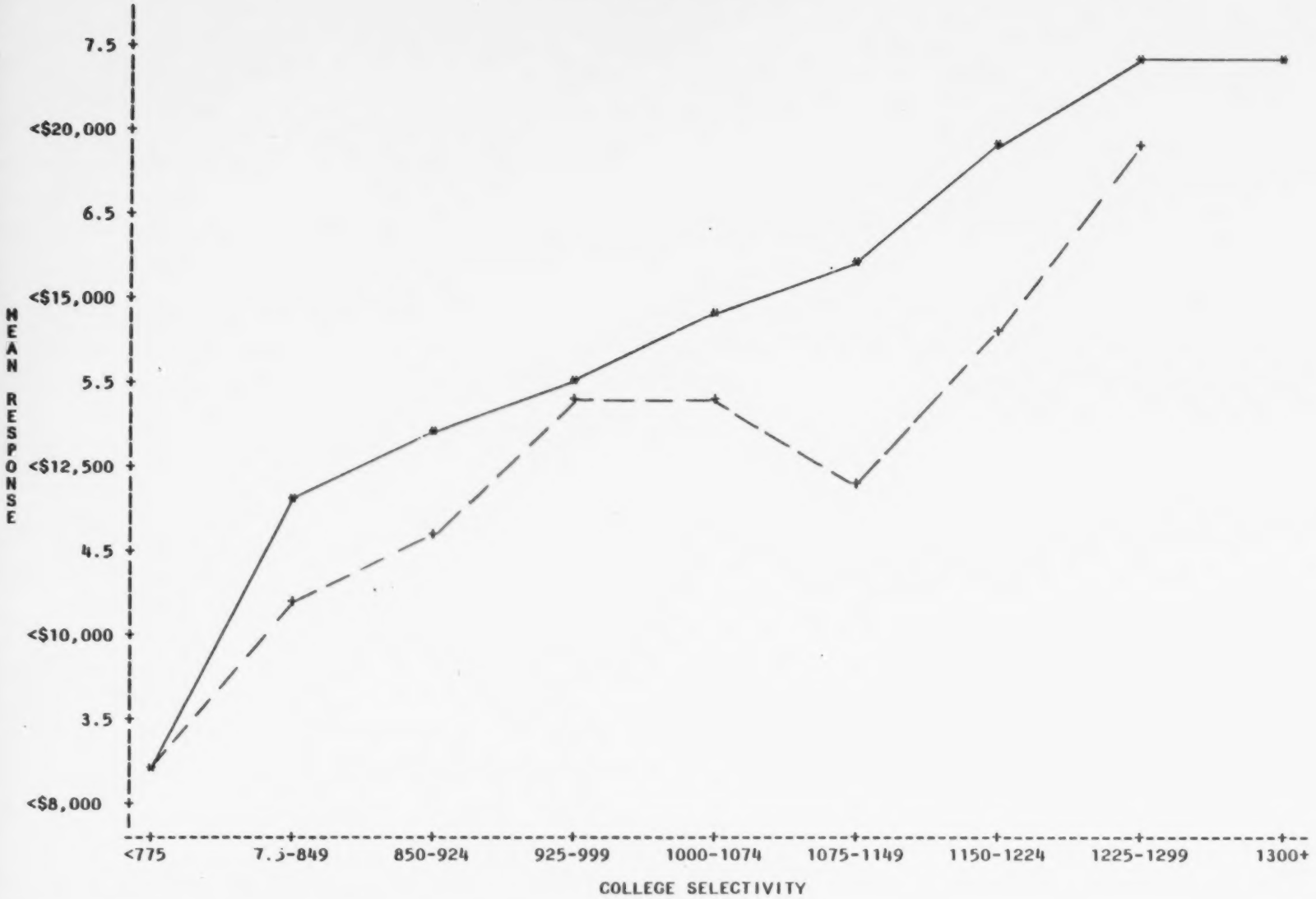
Presented by

John A. Muffo
Virginia Tech

May 28, 1986

TABLE 1

STUDENT DEMOGRAPHICS BY COLLEGE SELECTIVITY
FAMILY INCOME IN 1971



NOTE: 1 OBS HAD MISSING VALUES

Table 1

Variables:

College Selectivity

by

Family Income in 1971

(*) Private Institutions (*)

as compared to

(+) Public Institutions (+)

Interpretation:

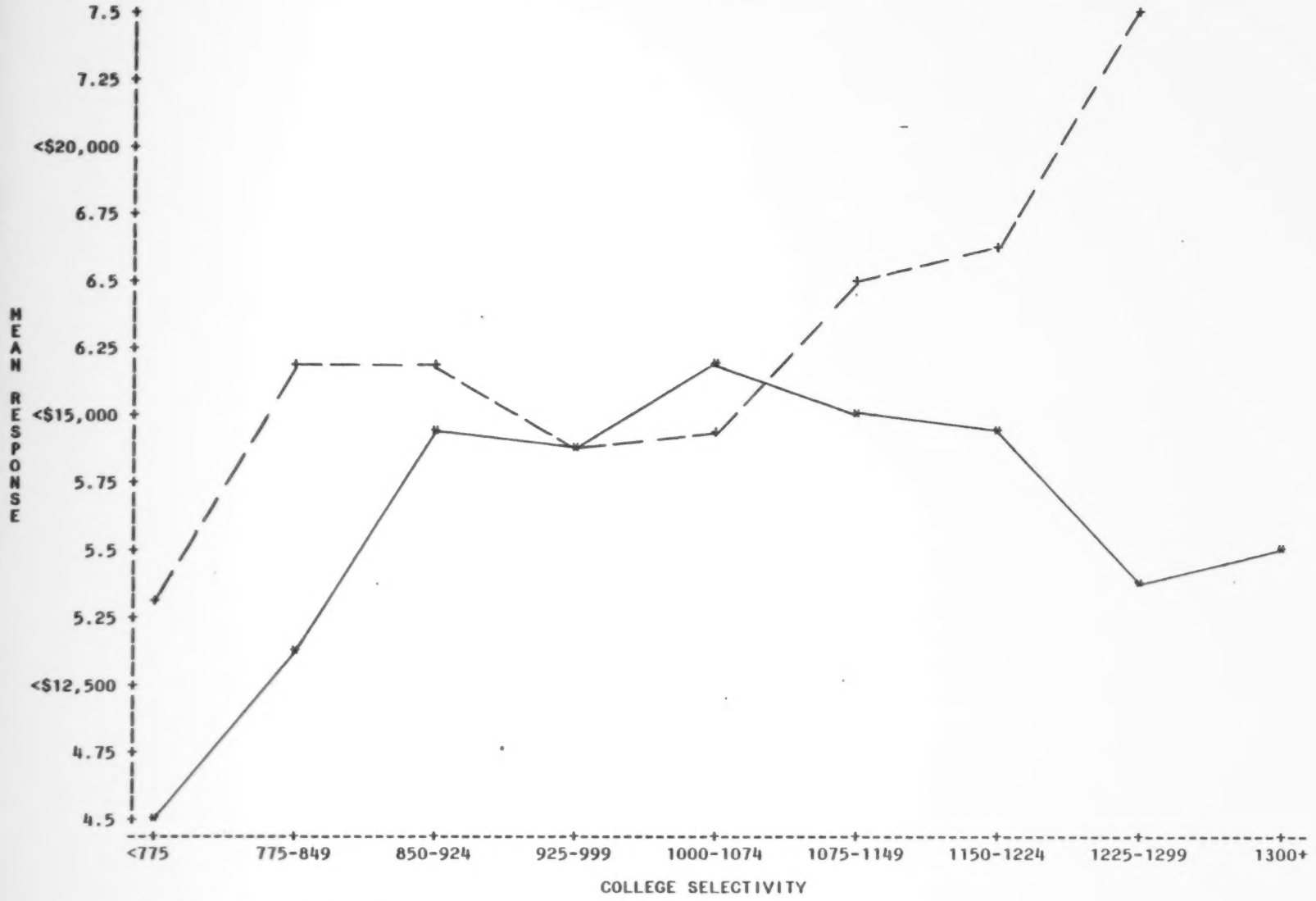
The more selective an institution, the more likely it is to draw students from high income families.

Correlation (r) = .35

Significance Level = <.0001

TABLE 2

STUDENT DEMOGRAPHICS BY COLLEGE SELECTIVITY
FAMILY INCOME IN 1980



NOTE: 1 OBS HAD MISSING VALUES

71

71

Table 2

Variables:

College Selectivity

by

Family Income in 1980

(*) Private Institutions (*)

as compared to

(+) Public Institutions (+)

Interpretation:

There is no significant relationship between institutional selectivity and family income in 1980.

Alternate Explanation 1:

At nine years after college graduation, the effects of disproportionate graduate and professional school attendance among graduates of selective institutions have yet to become significant enough to show up in the 1980 income data.

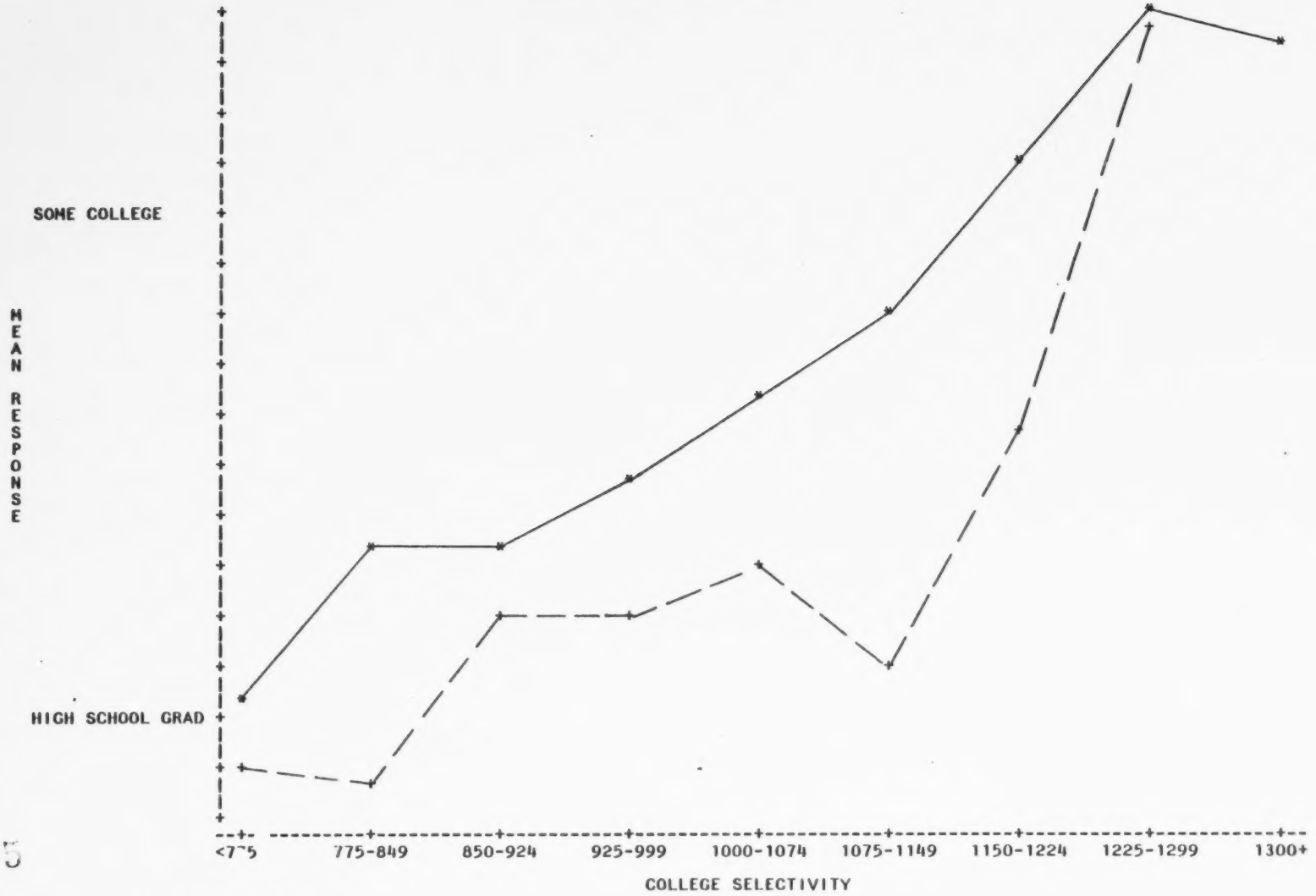
Alternate Explanation 2:

There is no real difference in incomes between graduates of more selective and less selective institutions.

Correlation (r) = not significant

TABLE 3

STUDENT DEMOGRAPHICS BY COLLEGE SELECTIVITY
MOTHERS EDUCATIONAL LEVEL



NOTE: 1 OBS HAD MISSING VALUES

Table 3

Variables:

College Selectivity

by

Mother's Educational Level

(*) Private Institutions (*)

as compared to

(+) Public Institutions (+)

Interpretation:

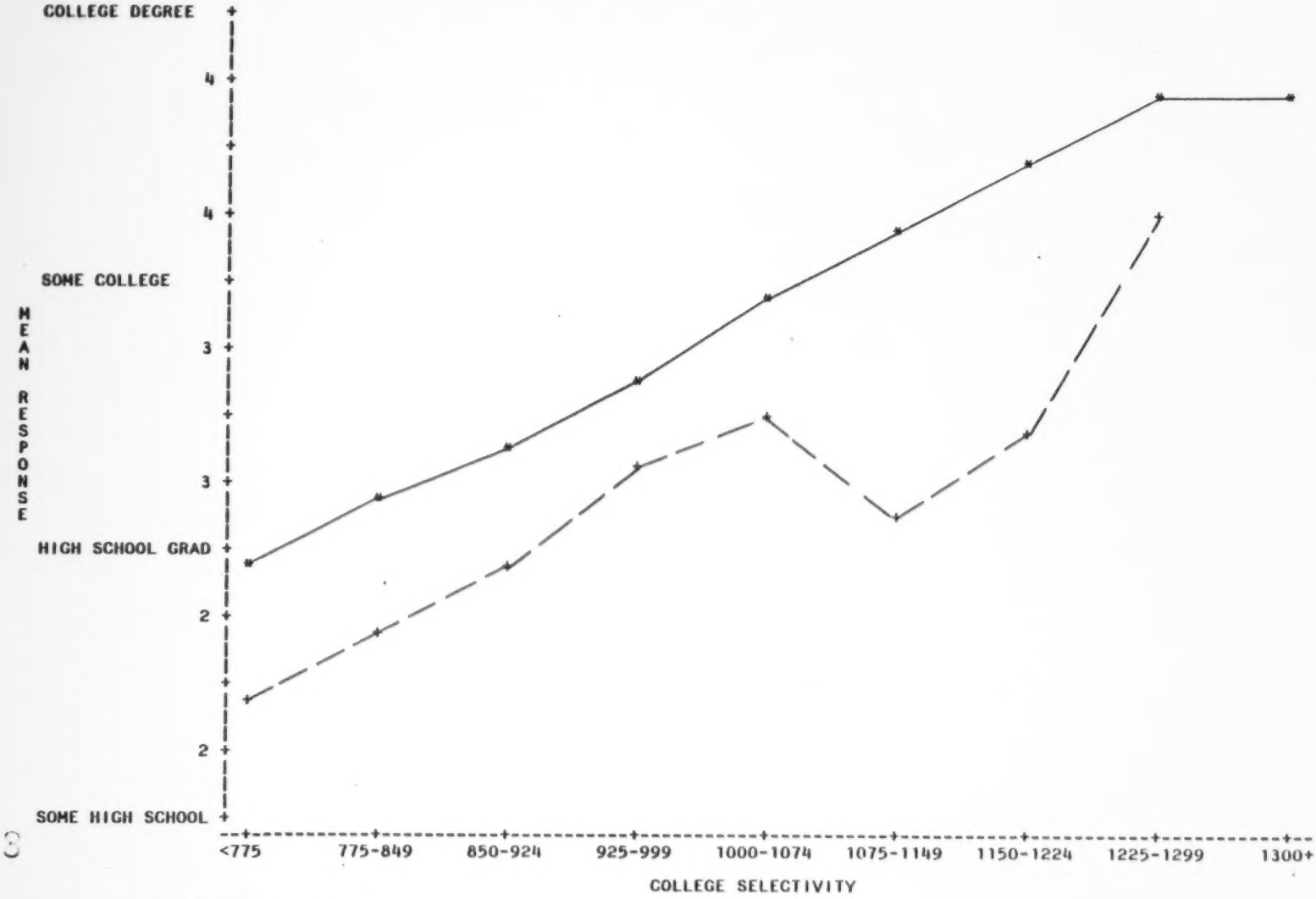
The more selective an institution, the more likely it is to draw students whose mothers have higher levels of education.

Correlation (r) = .29

Significance Level = <.0001

TABLE 4

STUDENT DEMOGRAPHICS BY COLLEGE SELECTIVITY
FATHERS EDUCATIONAL LEVEL



NOTE: 1 OBS HAD MI SING VALUES

Table 4

Variables:

College Selectivity

by

Father's Educational Level

(*) Private Institutions (*)

as compared to

(•) Public Institutions (•)

Interpretation:

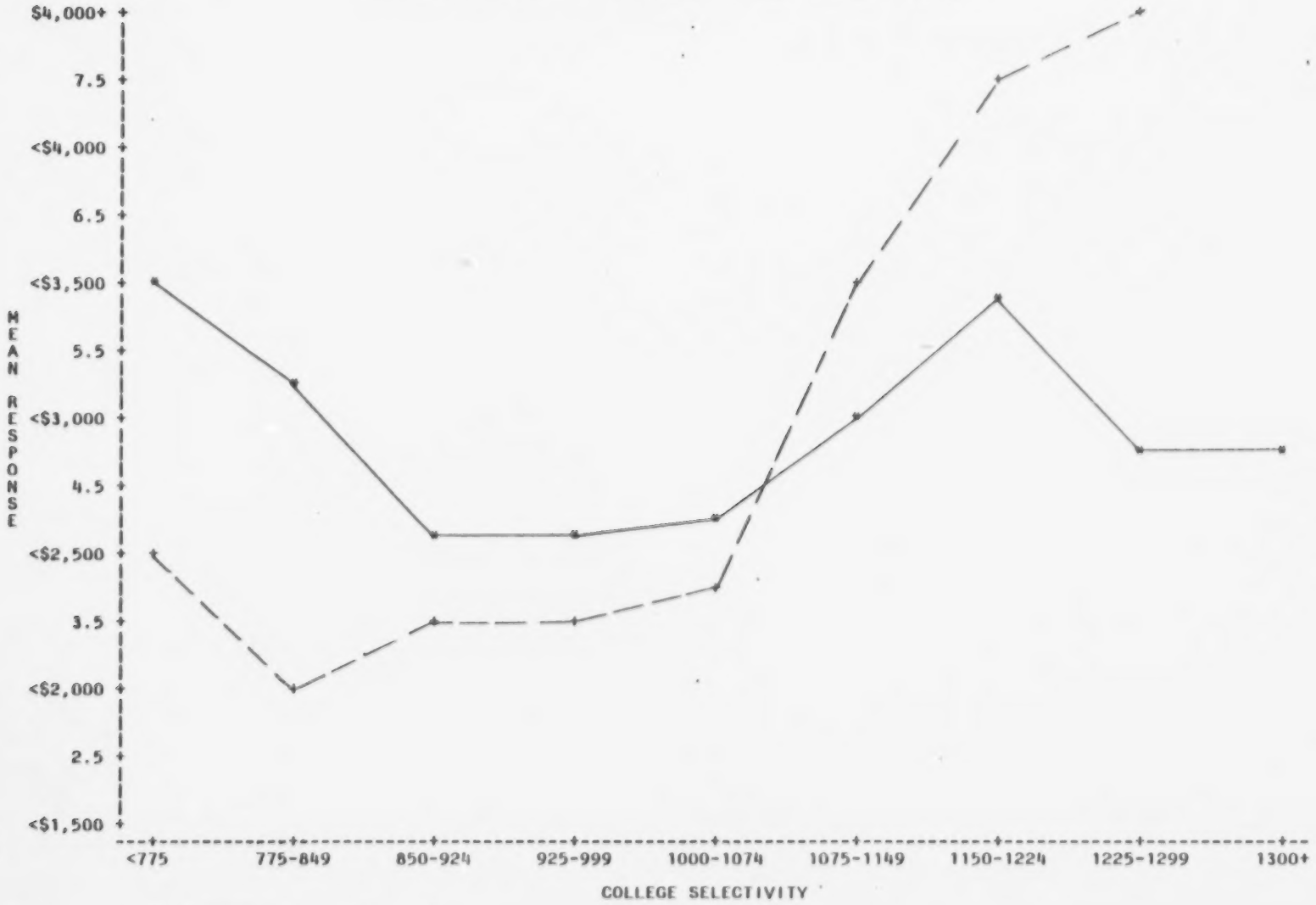
The more selective an institution, the more likely it is to draw students whose fathers have higher levels of education.

Correlation (r) = .35

Significance Level = <.0001

TABLE 5

INSTITUTIONAL CHARACTERISTICS BY COLLEGE SELECTIVITY
EDUCATIONAL AND GENERAL EXPENDITURES PER STUDENT IN 1980



NOTE: 1 OBS HAD MISSING VALUES

Table 5

Variables:

College Selectivity

by

Educational and General Expenditures

per Student in 1980

(*) Private Institutions (*)

as compared to

(•) Public Institutions (•)

Interpretation:

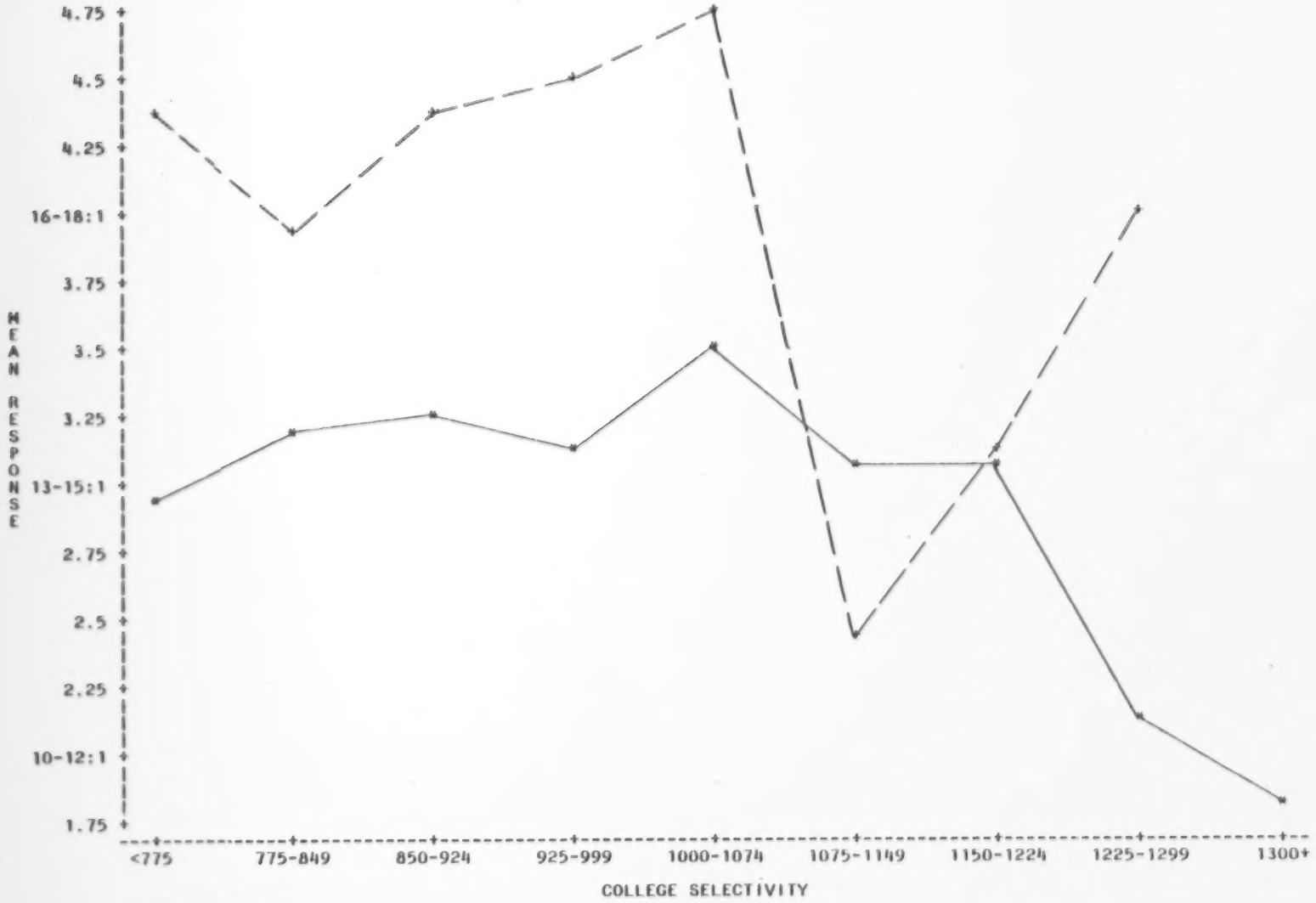
The more selective an institution, the higher the level of educational and general expenditures per student. The differences are more pronounced among public than among private institutions.

Correlation (r) = .55

Significance Level = <.0001

TABLE 6

INSTITUTIONAL CHARACTERISTICS BY COLLEGE SELECTIVITY
STUDENT-TO-FACULTY RATIO IN 1980



NOTE: 1 OBS HAD MISSING VALUES

Table 6

Variables:

College Selectivity

by

Student-to-Faculty Ratio in 1980

(*) Private Institutions (*)

as compared to

(•) Public Institutions (•)

Interpretation:

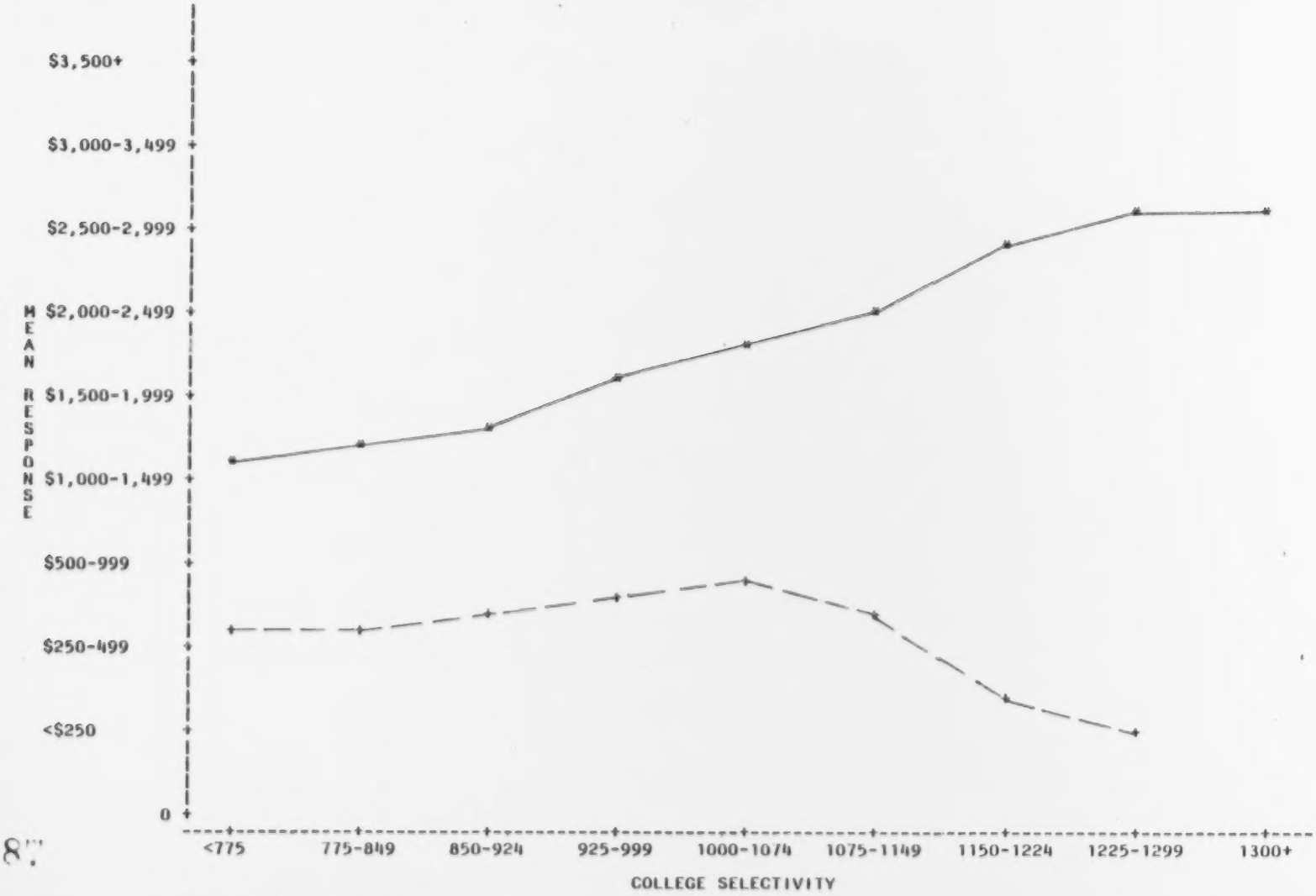
The more selective an institution, the lower the student-to-faculty ratio.

Correlation (r) = -.31

Significance Level = <.0001

TABLE 7

INSTITUTIONAL CHARACTERISTICS BY COLLEGE SELECTIVITY
COLLEGE TUITION IN 1980



NOTE: 1 OBS HAD MISSING VALUES

Table 7

Variables:

College Selectivity

by

College Tuition in 1980

(*) Private Institutions (*)

as compared to

(+) Public Institutions (+)

Interpretation:

The more selective an institution, the higher the undergraduate tuition. This holds true more for private institutions than for public ones.

Correlation (r) = .61

Significance Level = <.0001

TABLE 8

STUDENT ATTITUDES BY COLLEGE SELECTIVITY
MONETARY BENEFIT OF COLLEGE

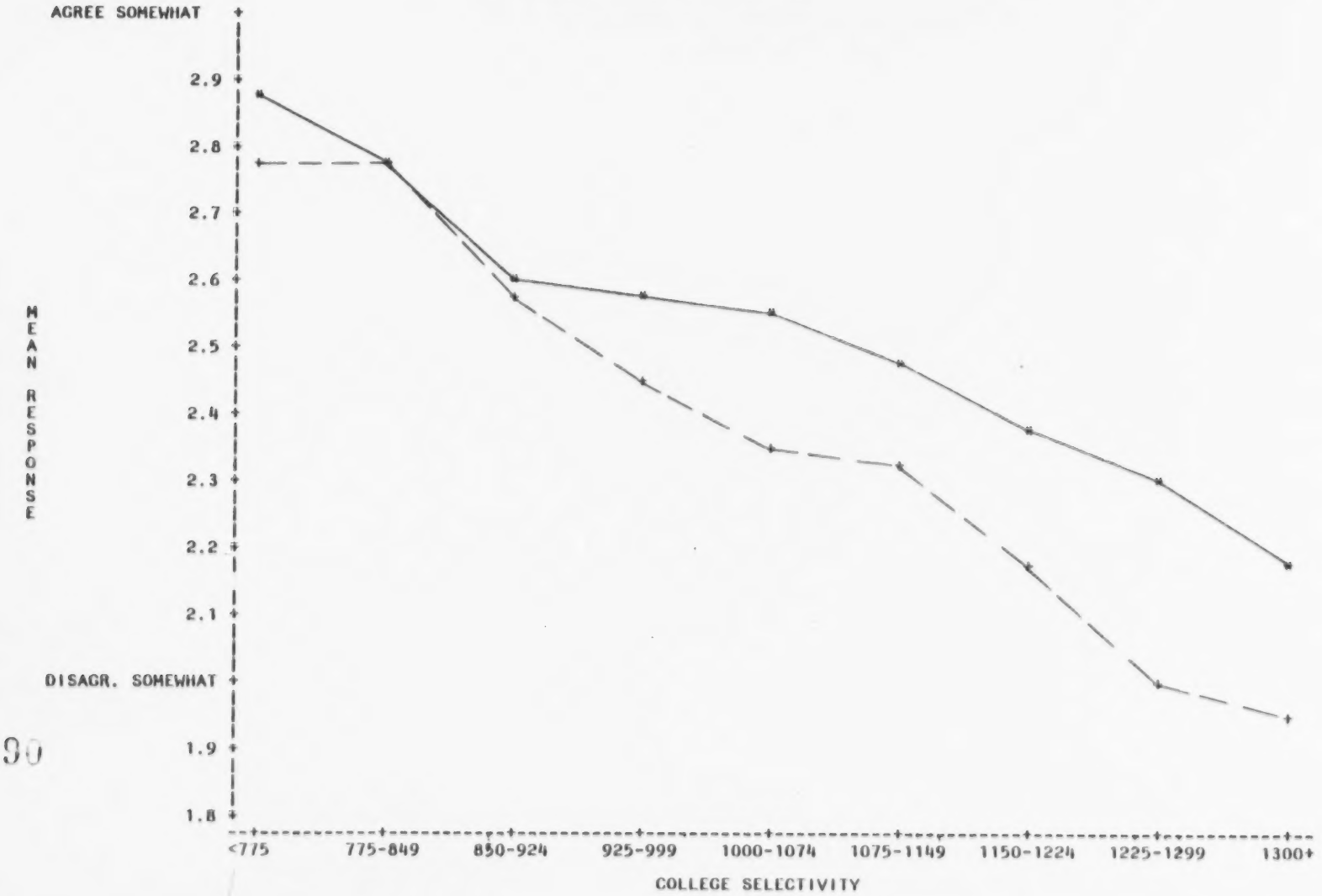


Table 8

Variables:

College Selectivity

by

College's chief benefit is that it

increases earning power.

(*) 1980 (*)

as compared to

(+) 1971 (+)

Interpretation:

The more selective an institution, the more likely that students disagree that the primary benefit of college attendance is increased earning power.

Correlation (r) = -.22 for 1971

Correlation (r) = -.13 for 1980

Significance Level = <.0001 for both years

TABLE 9

STUDENT ATTITUDES BY COLLEGE SELECTIVITY
STUDENTS EVALUATE FACULTY

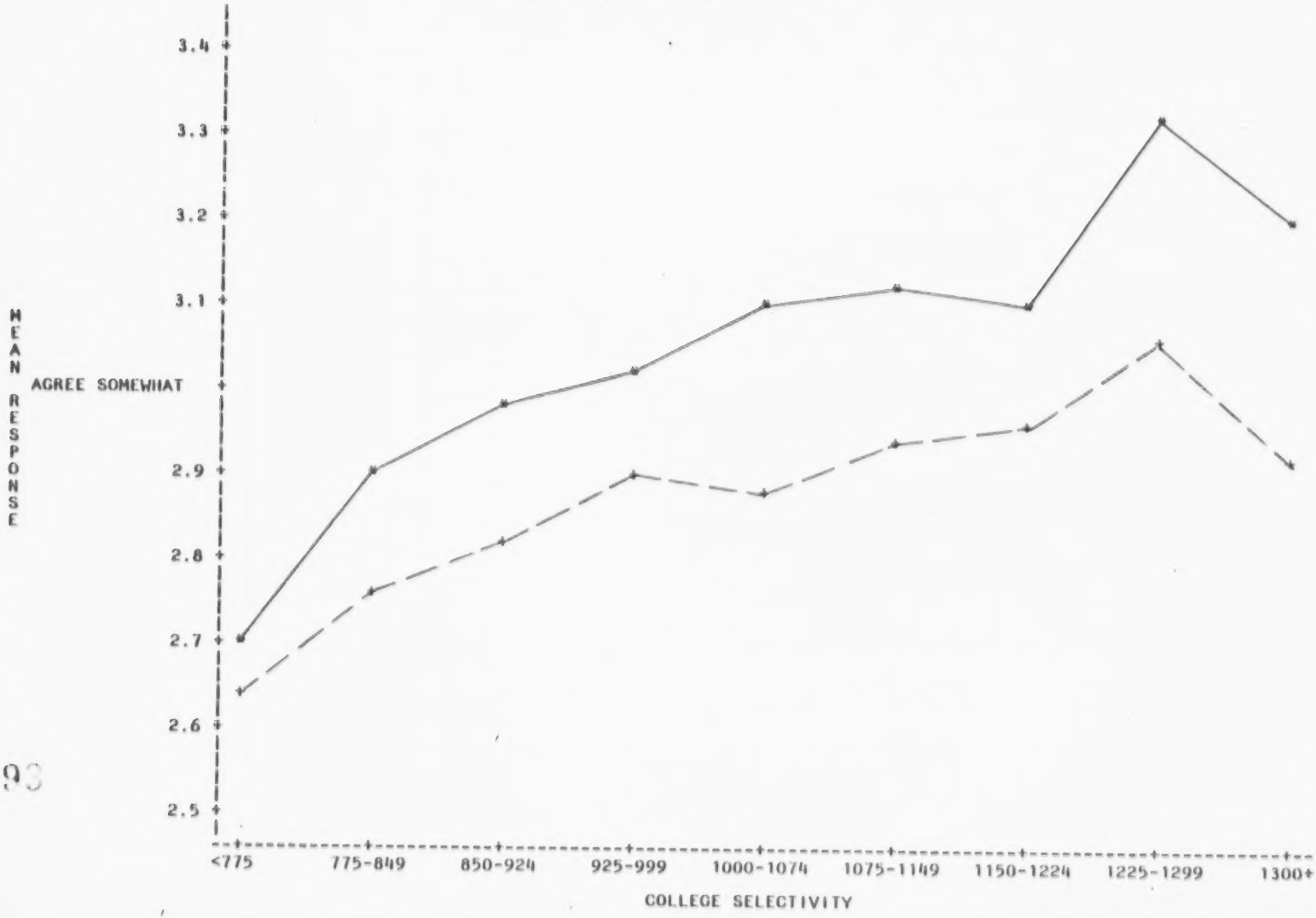


Table 9

Variables:

College Selectivity

by

Students have a right to evaluate

faculty teaching performance.

(*) 1980 (*)

as compared to

(+) 1971 (+)

Interpretation:

The more selective an institution, the more likely that students agree that they have a right to evaluate faculty performance in the classroom.

Correlation (r) = .12 for 1971

Correlation (r) = .16 for 1980

Significance Level = <.0001 for both years

TABLE 10

STUDENT ATTITUDES BY COLLEGE SELECTIVITY
COLLEGE BAN EXTREME SPEAKERS

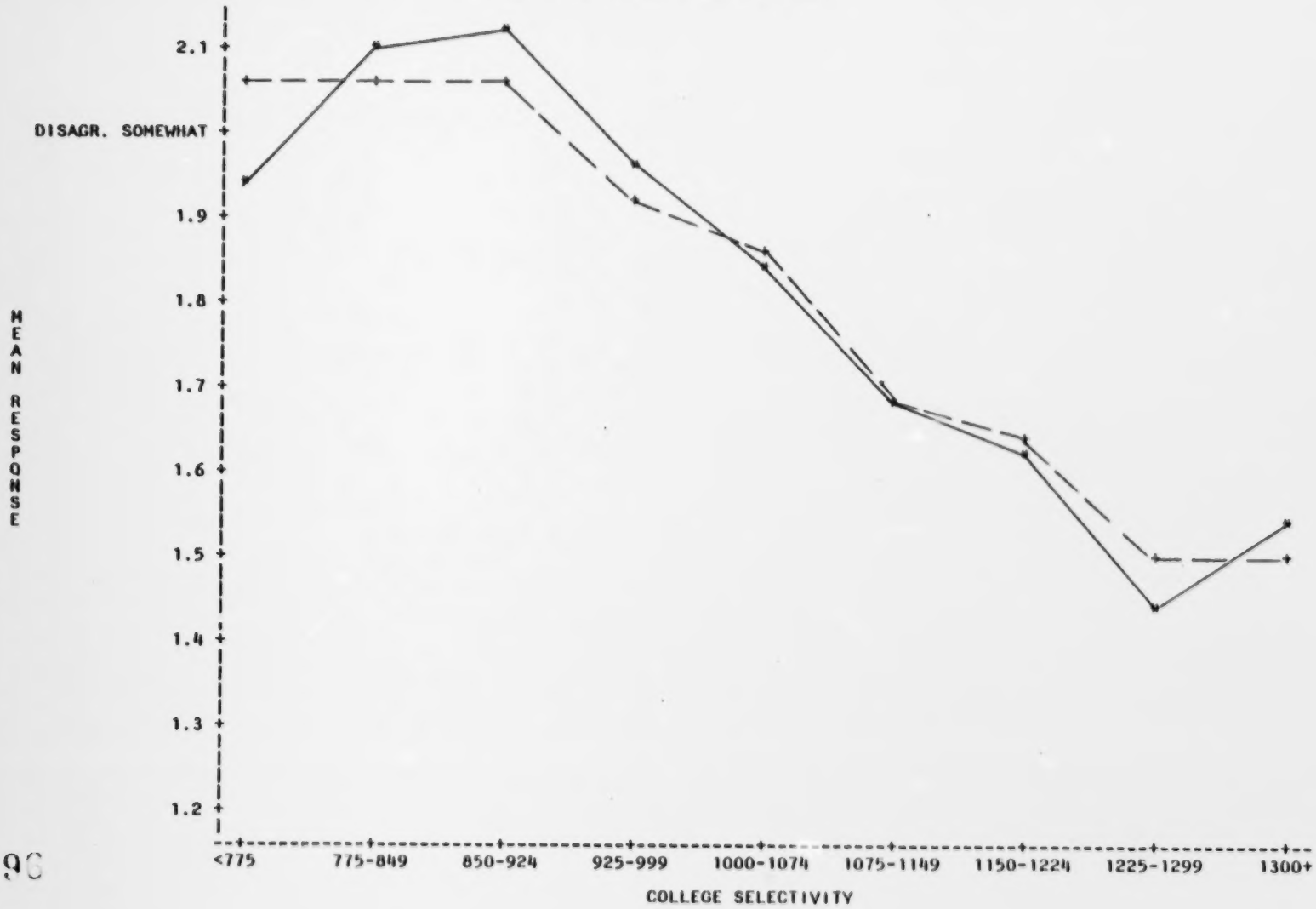


Table 10

Variables:

College Selectivity

by

College officials have a right

to ban extremist speakers.

(*) 1980 (*)

as compared to

(+) 1971 (+)

Interpretation:

The more selective an institution, the more likely that students disagree that the college officials have a right to ban extremist speakers from campus.

Correlation (r) = -.19 for 1971

Correlation (r) = -.19 for 1980

Significance Level = <.0001 for both years

TABLE 11

STUDENT ATTITUDES BY COLLEGE SELECTIVITY
PREFERENTIAL TREATMENT FOR THE DISADVANTAGED

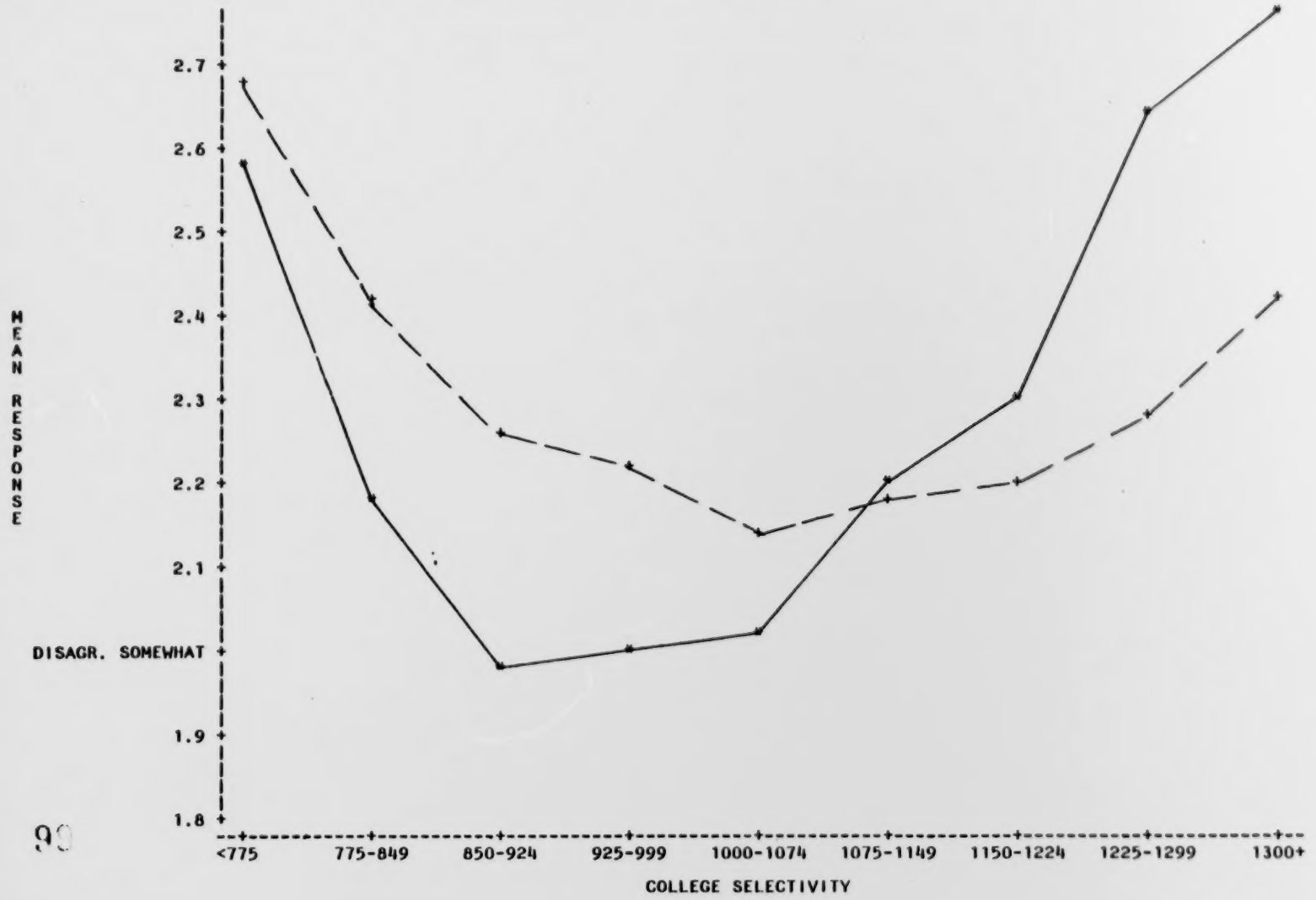


Table 11

Variables:

College Selectivity

by

Preferential treatment for the disadvantaged

is acceptable in our society.

(*) 1980 (*)

as compared to

(+) 1971 (+)

Interpretation:

Those attending moderately selective institutions are less likely to agree that preferential treatment of the disadvantaged is acceptable, while those attending the least selective and most selective institutions are more likely to agree with this statement. The variation was more pronounced in 1980 than in 1971.

Correlation (r) = -.07 for 1971

Correlation (r) = .10 for 1980

Significance Level = <.0001 for both years

TABLE 12

STUDENT ATTITUDES BY COLLEGE SELECTIVITY
OPEN ADMISSIONS FOR PUBLIC COLLEGES

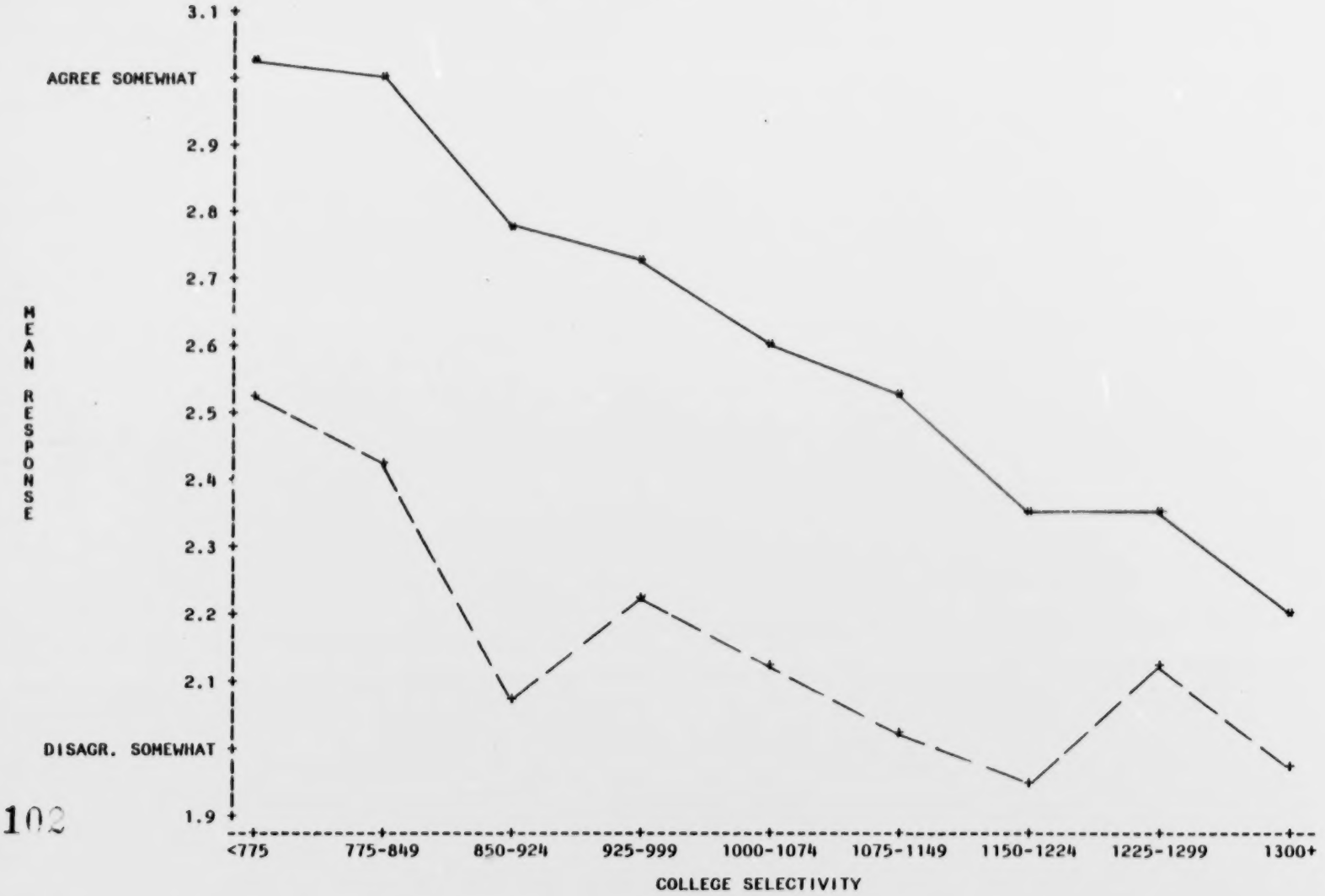


Table 12

Variables:

College Selectivity

by

Public colleges should adopt

open admissions policies.

(*) 1980 (*)

as compared to

(+) 1971 (+)

Interpretation:

The more selective an institution, the less likely that students agree that public institutions should adopt open admissions policies at the undergraduate level.

Correlation (r) = -.10 for 1971

Correlation (r) = -.17 for 1980

Significance Level = <.0001 for both years

TABLE 13

STUDENT ATTITUDES BY COLLEGE SELECTIVITY
USE SAME PERFORMANCE STANDARDS

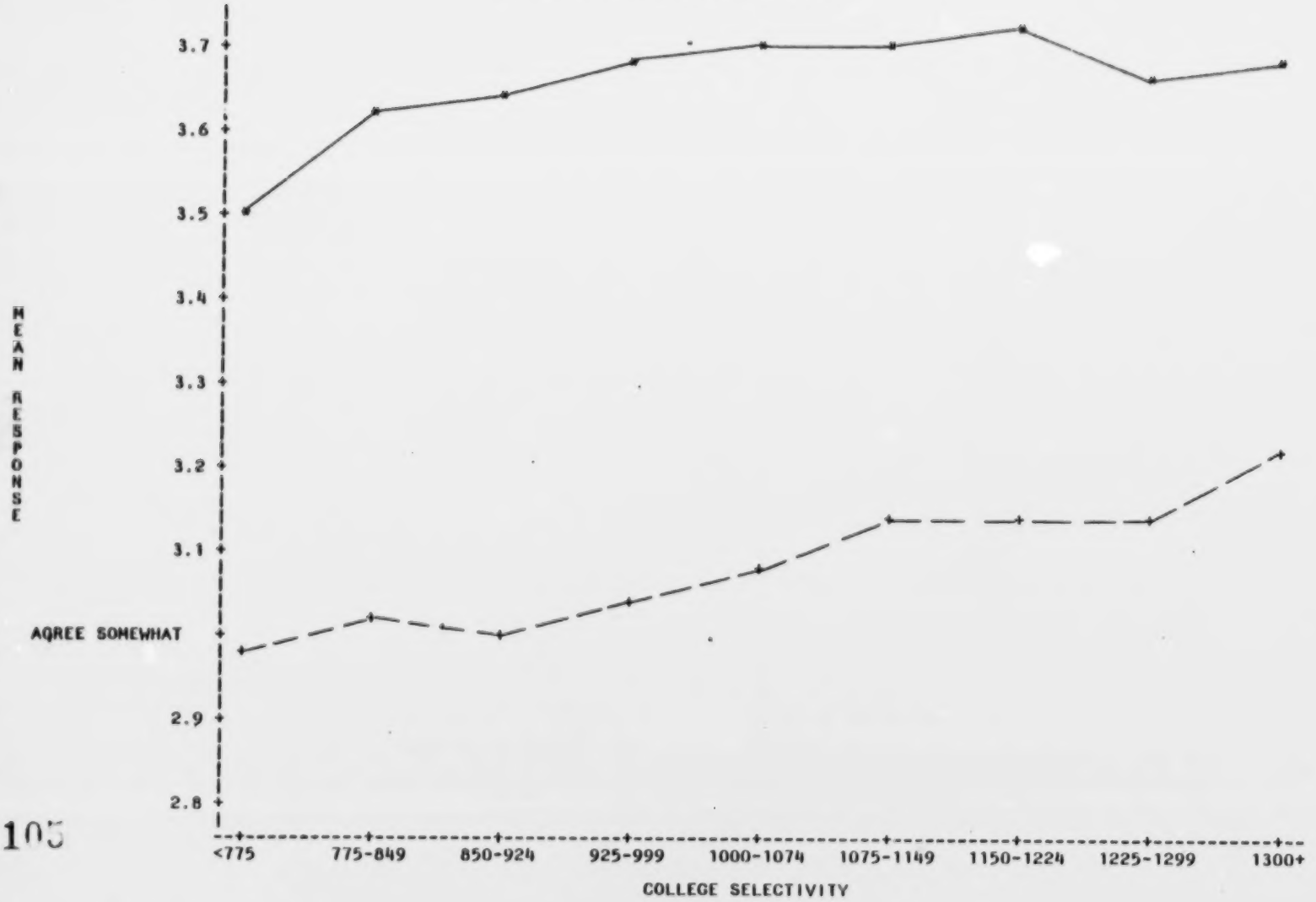


Table 13

Variables:

College Selectivity

by

The same performance standards should

be used in evaluating all people.

(*) 1980 (*)

as compared to

(+) 1971 (+)

Interpretation:

The more selective an institution, the more likely that students agree that all people should be evaluated using the same performance standards. The relationship was weaker in 1980 than in 1971.

Correlation (r) = .07 for 1971

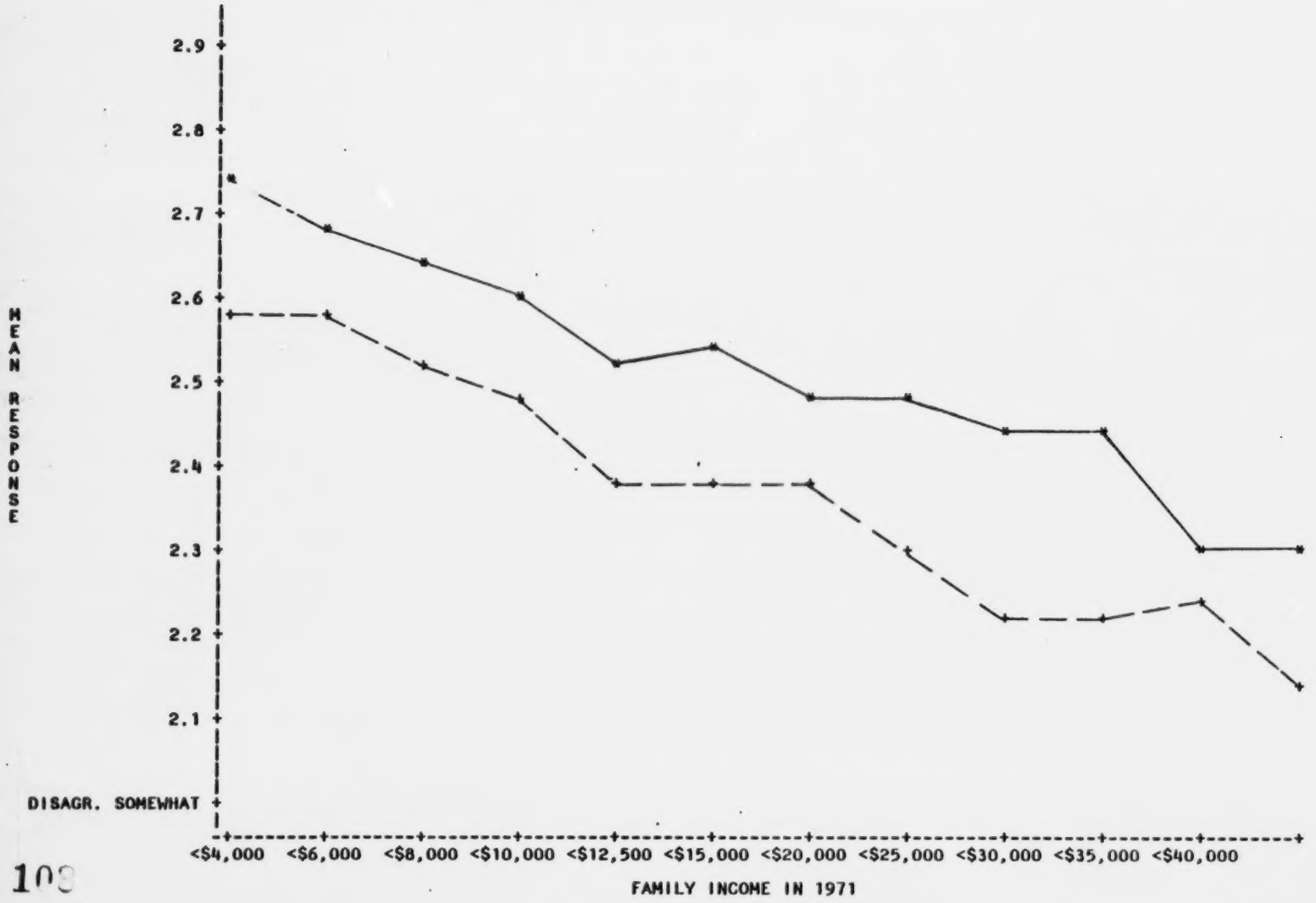
Correlation (r) = .04 for 1980

Significance Level = <.0001 for 1971

Significance Level = <.05 for 1980

TABLE 14

STUDENT ATTITUDES BY FAMILY INCOME
MONETARY BENEFIT OF COLLEGE



109

Table 14

Variables:

Family Income Level

by

College's chief benefit is that it

increases earning power.

(*) 1980 (*)

as compared to

(+) 1971 (+)

Interpretation:

The higher the family income level, the more likely that students disagree that the primary benefit of college attendance is increased earning power.

Correlation (r) = -.13 for 1971

Correlation (r) = -.10 for 1980

Significance Level = <.0001 for both years

TABLE 15

STUDENT ATTITUDES BY FAMILY INCOME
STUDENTS EVALUATE FACULTY

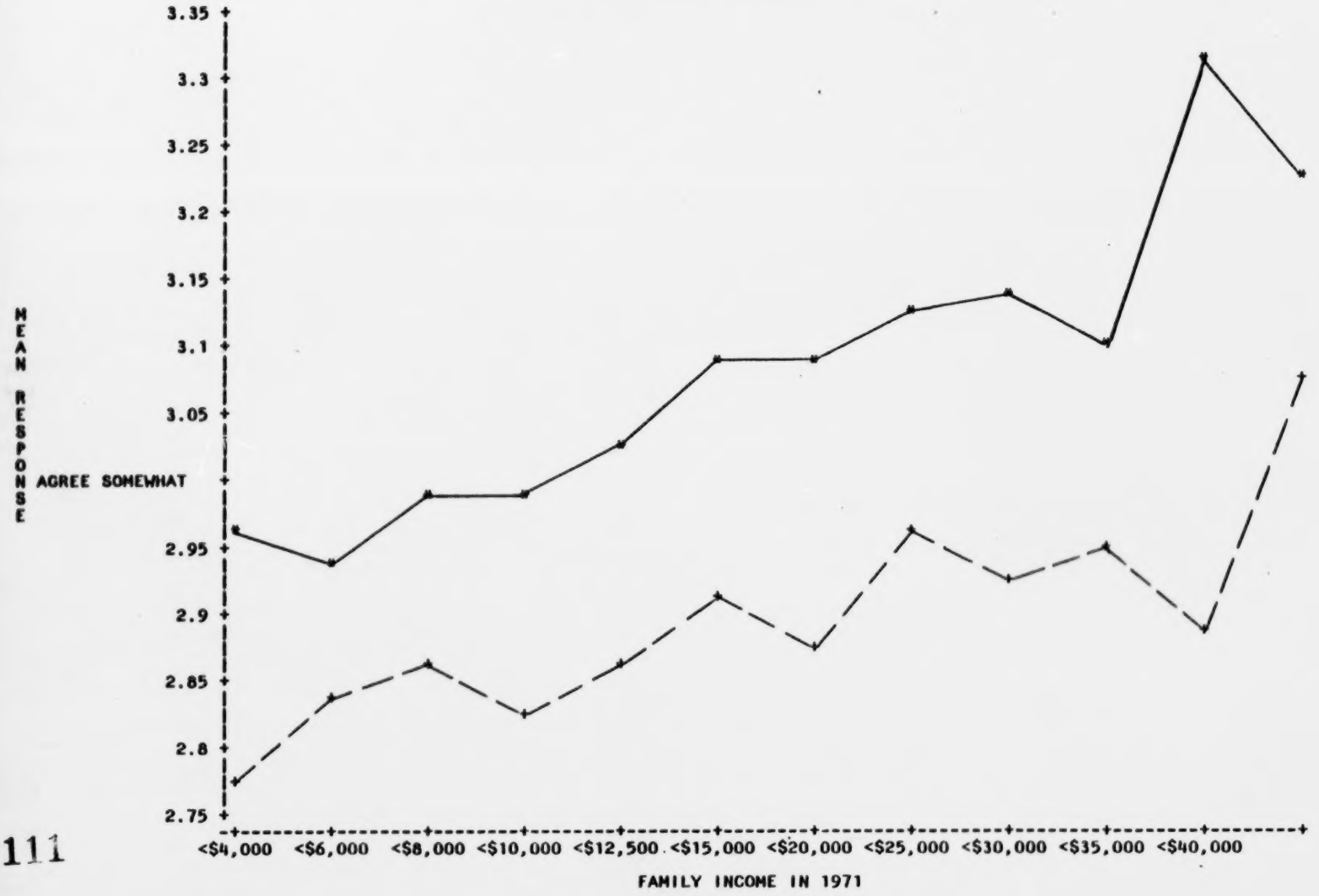


Table 15

Variables:

Family Income Level

by

Students have a right to evaluate

faculty teaching performance.

(*) 1980 (*)

as compared to

(+) 1971 (+)

Interpretation:

The higher the family income level, the more likely that students agree that they have a right to evaluate faculty performance in the classroom.

Correlation (r) = .07 for 1971

Correlation (r) = .10 for 1980

Significance Level = <.0001 for both years

TABLE 16

STUDENT ATTITUDES BY FAMILY INCOME
COLLEGE BAN EXTREME SPEAKERS

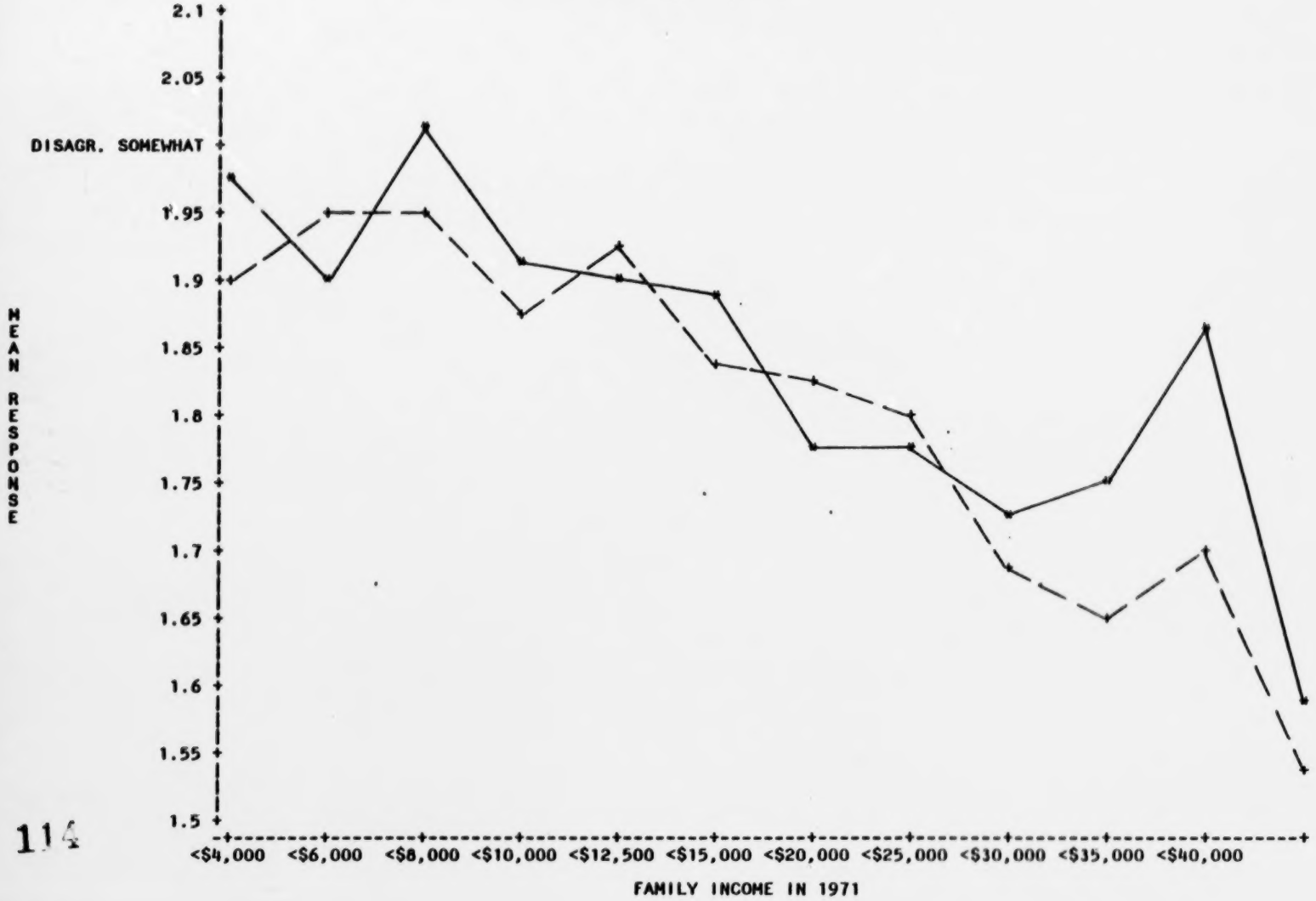


Table 16

Variables:

Family Income Level

by

College officials have a right

to ban extremist speakers.

(*) 1980 (*)

as compared to

(+) 1971 (+)

Interpretation:

The higher the family income level, the more likely that students disagree that the college officials have a right to ban extremist speakers from campus.

Correlation (r) = -.10 for 1971

Correlation (r) = -.08 for 1980

Significance Level = <.0001 for both years

TABLE 17

STUDENT ATTITUDES BY FAMILY INCOME
PREFERENTIAL TREATMENT FOR THE DISADVANTAGED

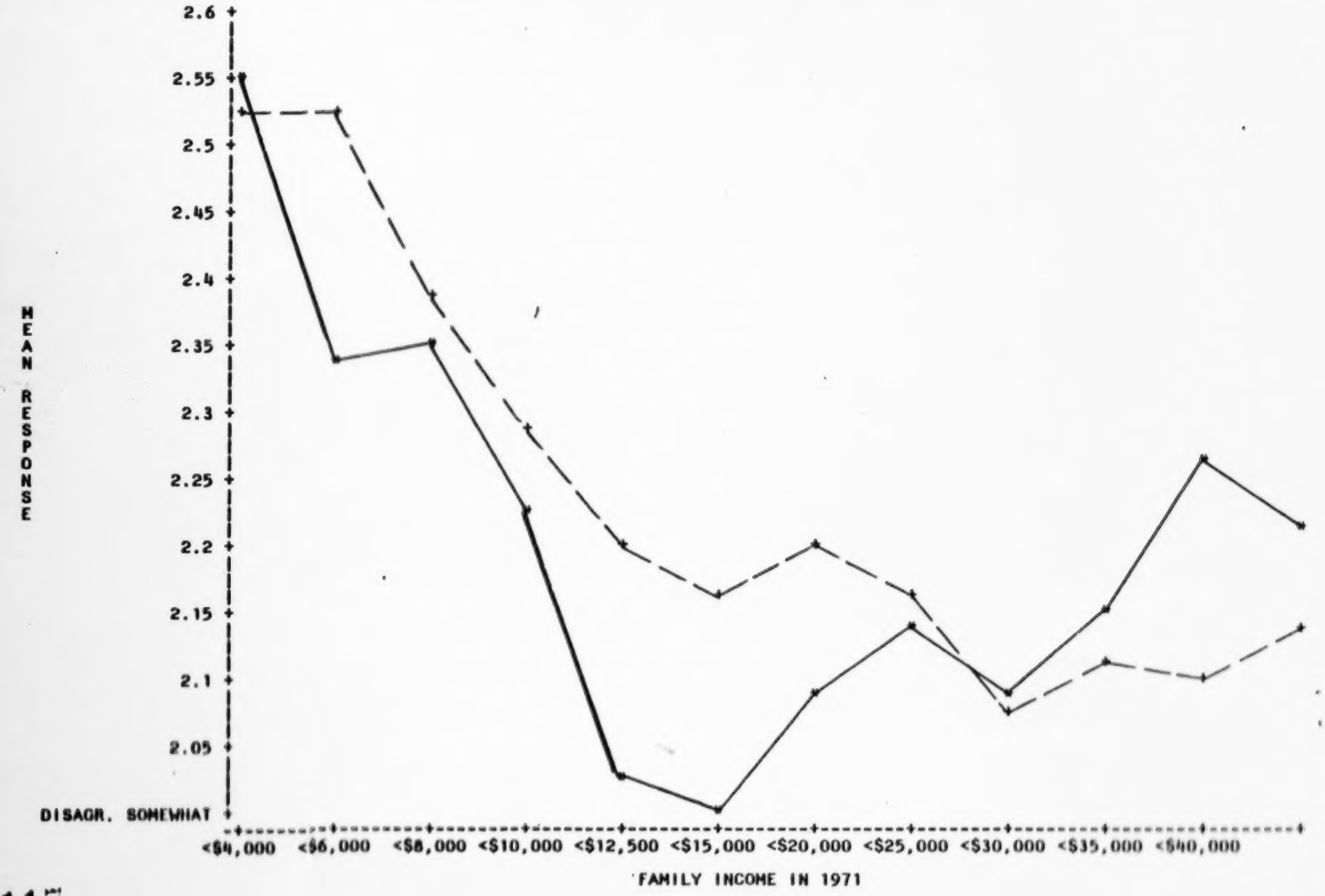


Table 17

Variables:

Family Income Level

by

Preferential treatment for the disadvantaged

is acceptable in our society.

(*) 1980 (*)

as compared to

(+) 1971 (+)

Interpretation:

The higher the family income level, the more likely that students disagree that preferential treatment of the disadvantaged is acceptable.

Correlation (r) = -.12 for 1971

Correlation (r) = -.06 for 1980

Significance Level = <.0001 for 1971

Significance Level = <.001 for 1980

TABLE 18

STUDENT ATTITUDES BY FAMILY INCOME
OPEN ADMISSIONS FOR PUBLIC COLLEGES

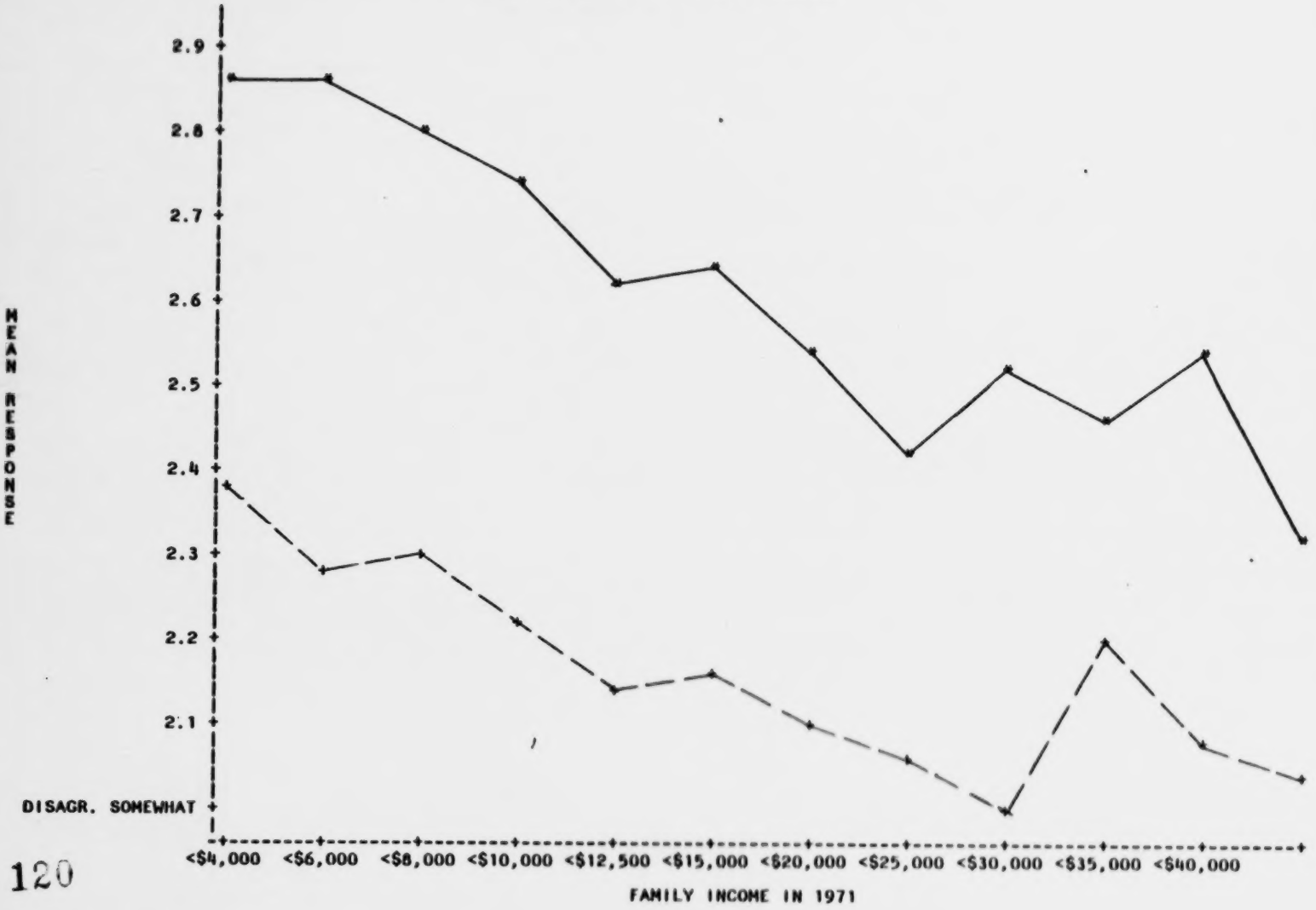


Table 18

Variables:

Family Income Level

by

Public colleges should adopt

open admissions policies.

(*) 1980 (*)

as compared to

(•) 1971 (•)

Interpretation:

The higher the family income level, the more likely that students disagree that public institutions should adopt open admissions policies at the undergraduate level.

Correlation (r) = -.05 for 1971

Correlation (r) = -.10 for 1980

Significance Level = <.001 for 1971

Significance Level = <.0001 for 1980

TABLE 19

STUDENT ATTITUDES BY FAMILY INCOME
USE SAME PERFORMANCE STANDARDS

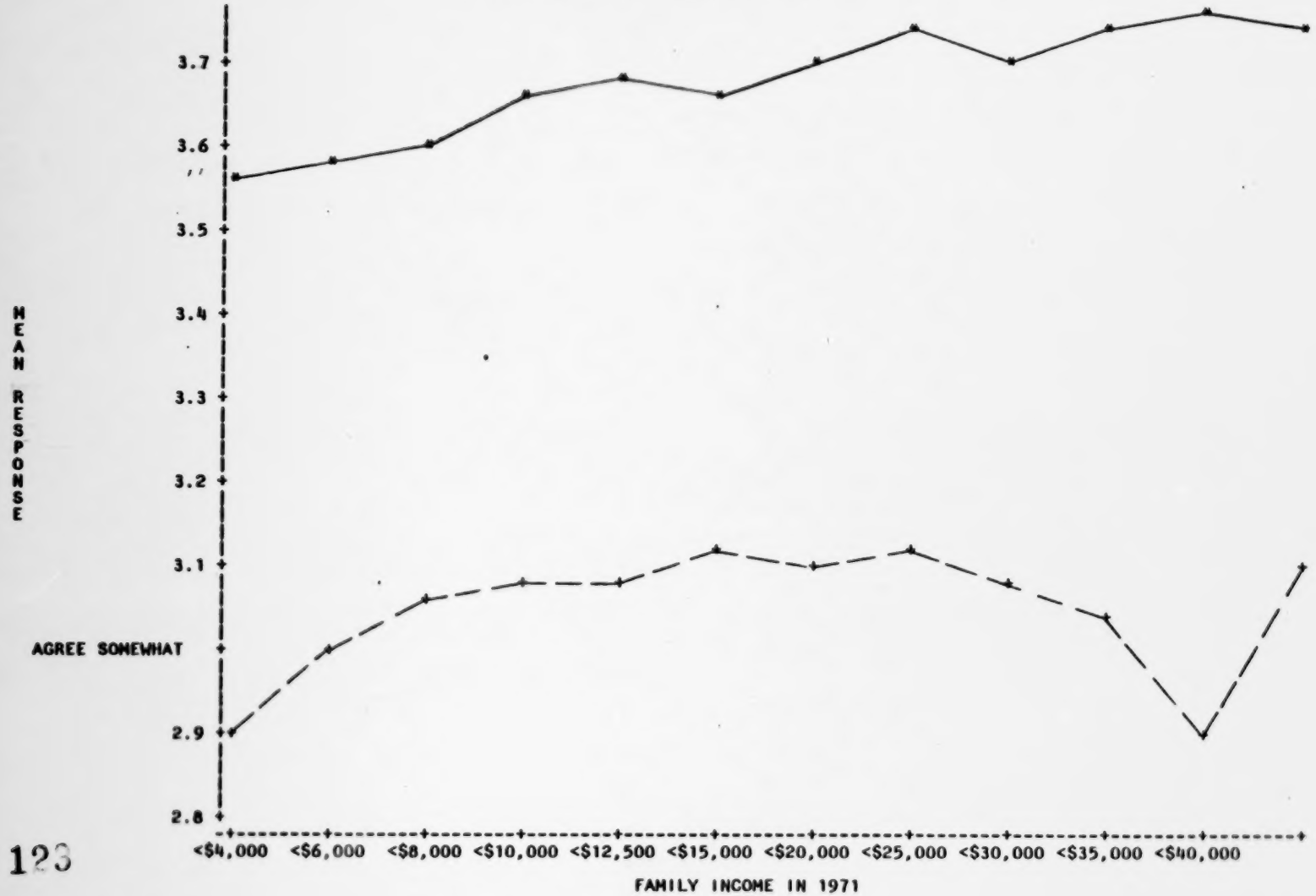


Table 19

Variables:

Family Income Level

by

The same performance standards should

be used in evaluating all people.

(*) 1980 (*)

as compared to

(+) 1971 (+)

Interpretation:

The higher the family income level, the more likely that students agreed in 1980 that all people should be evaluated using the same performance standards. The relationship was not significant in 1971.

Correlation (r) = not significant for 1971

Correlation (r) = .07 for 1980

Significance Level = not significant for 1971

Significance Level = <.0001 for 1980

Appendix I

Sample Sizes for Tables 1-7
College Selectivity by
Individual and Institutional Characteristics

College Mean SAT Score	Private	Public
<775	57	172
775-849	125	101
850-924	478	204
925-999	519	245
1000-1074	879	130
1075-1149	413	63
1150-1224	304	57
1225-1299	297	8
1300+	149	--

Appendix II

Sample Sizes for Tables 8-13
College Selectivity by
Student Attitudes towards College

College Mean SAT Score	1971 and 1980
<775	254
775-849	483
850-924	988
925-999	1,037
1000-1074	1,392
1075-1149	788
1150-1224	525
1225-1299	387
1300+	239

Appendix III

Sample Sizes for Tables 14-19
Family Income by
Student Attitudes towards College

Family Income in 1971	1971 and 1980
Less than $4,000	318
$4,000-$5,999	444
$6,000-$7,999	590
$8,000-$9,999	701
$10,000-$12,499	1,255
$12,500-$14,999	731
$15,000-$19,999	802
$20,000-$24,999	486
$25,000-$29,999	272
$30,000-$34,999	170
$35,000-$39,999	86
$40,000 or More	269

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July 1986

Public Enrollment, Private Enrollment, and Student Aid: A Supply and Demand Analysis

Michael S. McPherson

One might distinguish two basic strategies to use in sorting out the effects of federal student aid on enrollment patterns. One strategy, familiar from much recent work, is to identify the effects aid is "supposed" to have and then try to find those effects in the data (Hansen, 1982; Hearn and Wilford, 1985; McPherson, 1985). The other strategy is to look for important changes in enrollment trends, and then try to see if those changes can plausibly be linked to changes in student financial aid.

One such important trend change is the focus of this paper. It is the sharp change in the trend in the share of public relative to private enrollment in higher education that occurred in the mid-1970's. As we all know, the public share of total enrollment grew rapidly during the 1950's and 1960's, going from roughly 50% to roughly 75% of total enrollment by the early 1970's, but during the 1970's that growth in the public share came to an abrupt halt. In 1984 the public share was right where it was in 1975.

This rather spectacular change in behavior can be brought out by comparing the growth rates of public and private enrollment shown in figure 1. (The growth rates are expressed as annual averages over periods of three or four years to provide some smoothing.) We see that

from the mid-1960's through the mid-1970's public enrollment grew much faster than private -- with public enrollment rising at annual rates of between five and ten percent while private enrollment grew less than two percent per year. But after that public enrollment (on a full time equivalent basis) actually fell moderately and then recovered moderately while public enrollment continued to grow at the same one or two percent per year.

This is a large and interesting change in the relative behavior of the two sectors. What's going on? Two obvious points are worth making.

First, we should notice the remarkable <u>stability</u> in private enrollment growth. While public enrollment growth has fluctuated widely -- presumably in response to demand fluctuations (see the second point below), the private enrollment growth rate stays between one and two percent for every interval from the mid-1960's on. This strongly suggests that enrollment in private higher eduacation is <u>supply</u> driven rather than <u>demand</u> driven.

A simple and plausible behavioral model suggests itself. Most private institutions have an enrollment target, roughly equal to or modestly larger than their current enrollment. If enrollment demand rises more rapidly than the target, they respond by raising price or admission standards; if demand drops off, they try very hard to keep enrollments up, by adjusting price and admission standards and increasing recruitment efforts. Since there is little entry to or exit

from nonprofit private higher education, this "target supply" behavior of individual "firms" dictates the supply behavior of private institutions to the market as a whole. The net result is slow, steady growth.

But, second, public enrollment seems much more responsive to demand conditions than private enrollment. In broad outline, public enrollment behavior over the last two decades traces out demographically induced fluctuations in enrollment demand. The high growth period corresponds to the "baby boom" period; much slower growth after the mid-1970's reflects the waning of the baby boom.

This public institution behavior likewise seems consistent with a simple behavioral model. Since the 1960's, public systems of higher education have been constrained not to restrict supply (although some individual campuses have that power); during periods of excess demand legislatures have been very willing to add capacity in public higher education. When demand falls, public institutions have much less control over the levers they might pull to attract more students -- key features of their pricing and admissions policies are, if not always directly set by legislatures, heavily politically constrained. Thus overall public enrollments fluctuate with demand.

I shall return in conclusion to some analytical implications of the apparent fact that the supply behavior of public and private colleges are very differently governed. But first I want to pursue further the question whether the striking change in public relative to

private enrollment growth trend can be linked to changing student aid policies and practices.

The natural question for an economist to ask is whether this shift in relative enrollment trends has anything to do with changes in price trends. The answer appears to be "Yes, it does". Figure 1 displays, along with the enrollment growth rates, a measure of the growth rate of the "tuition gap" -- the dollar difference between private and public tuition. The measure reported here attempts (in the face of some data limitations) to account for the fact that the nominal prices "posted" by colleges do not reflect the charges students actually face, because of student financial aid. Figure 1 reports on a "per student" basis gross tuition revenue received by colleges less the amount of federal student aid students receive to help pay those costs.[1] The figures are all adjusted for inflation, using the Consumer Price Index.

It is clear from Figure 1 that the movement in the tuition gap tracks the change in enrollment trends remarkably well. During the late 1960's, the tuition gap grew rapidly in real terms at the same time the public enrollment share grew rapidly. During the 1970's, the

---

1. These figures omit state-funded and institutionally funded student aid, data which are not available on a consistent basis over the entire period. Omitted for the same reason are social security payments to students and guaranteed student loans. The aid figures do, importantly, include GI Bill payments as well as the "Title IV" student aid programs other than GSL. Although the imprecision in the reported figures is non-trivial, I do not believe better numbers would upset the basic conclusions arrived at here.

gap first grew more slowly and then actually fell at the same time public enrollment growth slowed dramatically, both absolutely and compared to private growth. In the early seventies, the gap has resumed growing and public enrollment has recovered some relative to private.

Although other factors such as changing admissions policies may also be at work, I strongly suspect that this price effect on enrollment patterns is real. In particular the most obvious outside force affecting relative public and private enrollments, the rate of real income growth, moved adversely to privates in the late 1970's, and yet enrollment trends moved in their favor.

The next step in our inquiry is to ask what forces underly these changing tuition gap trends, and whether in particular changing student aid patterns are involved. One important force has nothing (or anyway nothing obvious) to do with aid. This is the simple fact that real tuitions grew in the 1960's and again in the 1980's, while they were stagnant in the 1970's as nominal tuition increases barely kept up with rapid inflation. Obviously when both public and private tuition increases outpace the inflation rate by the same percentage, the gap between public and private tuitions will also grow at that same rate. These shifts in tuition behavior in each sector are a major part of the explanation of the shifting trends in the tuition gap.

But these facts alone cannot explain the actual drop in the real-dollar tuition gap in the last half of the 1970's. A look at figures on federal student aid per f-t-e student (not per recipient) in each sector sheds some light on this development, and also turns up some surprises. We usually think of federal student aid as a factor that tends to "fill the gap" between public and private tuition, but figure 2 shows us that for much of the period since the beginning of the 1970's, federal student aid per enrollee has been larger in public than in private higher education -- thus adding to rather than reducing the tuition gap. In fact what we see is that it was in the late 1970's that federal aid switched from increasing the gap to reducing it -- and indeed it's that switch which caused the aid adjusted tuition gap pictured in figure 1 to shrink over the 1975-79 period.

How could public institutions possibly garner more aid per student than privates, whose higher tuitions not only cause more students to qualify for aid but also tend to produce more aid per student? Several factors are at work. First, public institutions enroll relatively more lower income students than privates do, and this helps them attract federal aid. Second, much federal aid is less tuition sensitive than we sometimes realize: at past and current funding levels, few colleges could qualify their students for more federal aid by raising tuition.[2]

But by far the most important factor in explaining the shift of federal aid from gap-widening to gap-closing in the 1970's is the influence of the GI Bill on the aggregate aid figures. Support to

veterans through the GI Bill accounted for over half of all federal student aid in 1975, and then tailed off very rapidly as Vietnam veterans moved through the system. And the Vietnam era GI Bill, like its Korean ancestor, but unlike the World War II version, was completely insensitive to tuition. The veteran was allotted a certain monthly payment for both schooling expenses and support and the amount was not adjusted for differences in schooling costs. Faced with these incentives 85% of veterans attended public colleges and universities, thereby bringing a great deal of federal funding to those institutions. Thus, in academic year 1975-76, GI Bill awards to veterans at public colleges equalled 16% of all the educational revenues of those institutions; by 1979-80 they had dropped to 5%. (The comparable figures for private institutions are 7% and 2%.)

This influx of veterans with federal money, it thus appears, did a good deal to bolster public college enrollments in the mid-1970's when demographic forces were starting to slow down the growth in overall demand. Then, just as this funding source was declining in the late 1970's, Congress passed the Middle Income Student Assistance Act, which had the effect of tilting the formulas in the Office of Education's

---

2. The principal exception to this statement is the GSL program. But that program was unimportant for much of the period under examination. As noted in footnote 1 above, GSL data could not be included in our federal aid accounting because they are not available by sector. If we could include GSL, it would strengthen the trends noted in the text, because GSL aid is relatively favorable to private institutions and has grown enormously since the late 1970's.

student aid programs toward the interests of private colleges. Thus in the space of a couple of years federal student aid went from a gap-widening to a gap-filling factor, and the results seem to show up pretty clearly in enrollment trends.

What lessons should we draw from this brief excursion into the history of enrollment trends? I would stress three.

First, sensible historical studies of the impact of federal student aid simply cannot neglect such "specially directed" aid programs as the GI Bill and social security. (For a study of social security's impact, see Ehrenberg and Luzadis, 1984). These programs are quantitatively large, subject to rapid changes in magnitude, and quite distinctive in form from other student aid programs. These features make the "specially directed" aid programs at once valuable sources of evidence on student aid effects and dangerous items to neglect.

Second, the numbers examined here suggest that federal aid policy can have substantial effects on the balance of enrollments between public and private institutions. In this case, the large swing in aid support engendered by the Vietnam era GI Bill seems to have had a substantial impact on the shares of enrollment in public and private colleges. I believe the World War II and Korea GI Bill experiences would similarly show that the form and amount of federal aid significantly affect student and institution behavior. (See Finn 1978 for a discussion.)

Finally, differences in public and private supply behavior seem to be of first rate analytical importance. Very little of the empirical work that has been done on measuring the enrollment impact of student aid has involved any explicit modeling of institutional supply behavior. The tacit, and sometimes explicit, assumption in much of this work is that institutions do not adjust their admissions or pricing policies to changes in the demand environment or in federal policies. Intuitively, this seems a highly unreasonable assumption; the present discussion adds the point that it is an assumption which is at odds with some readily available evidence.

Moreover, the present analysis suggests that supply behavior not only is less passive than is standardly assumed, it is also systematically different between sectors. If that is so, then much existing analysis which ignores these differences is likely to be seriously flawed. In particular, analyses which <u>aggregate</u> enrollment over the public and private sectors and relate those enrollments to prices that are <u>averaged</u> over the sectors are very likely to be nonsense.

Reference

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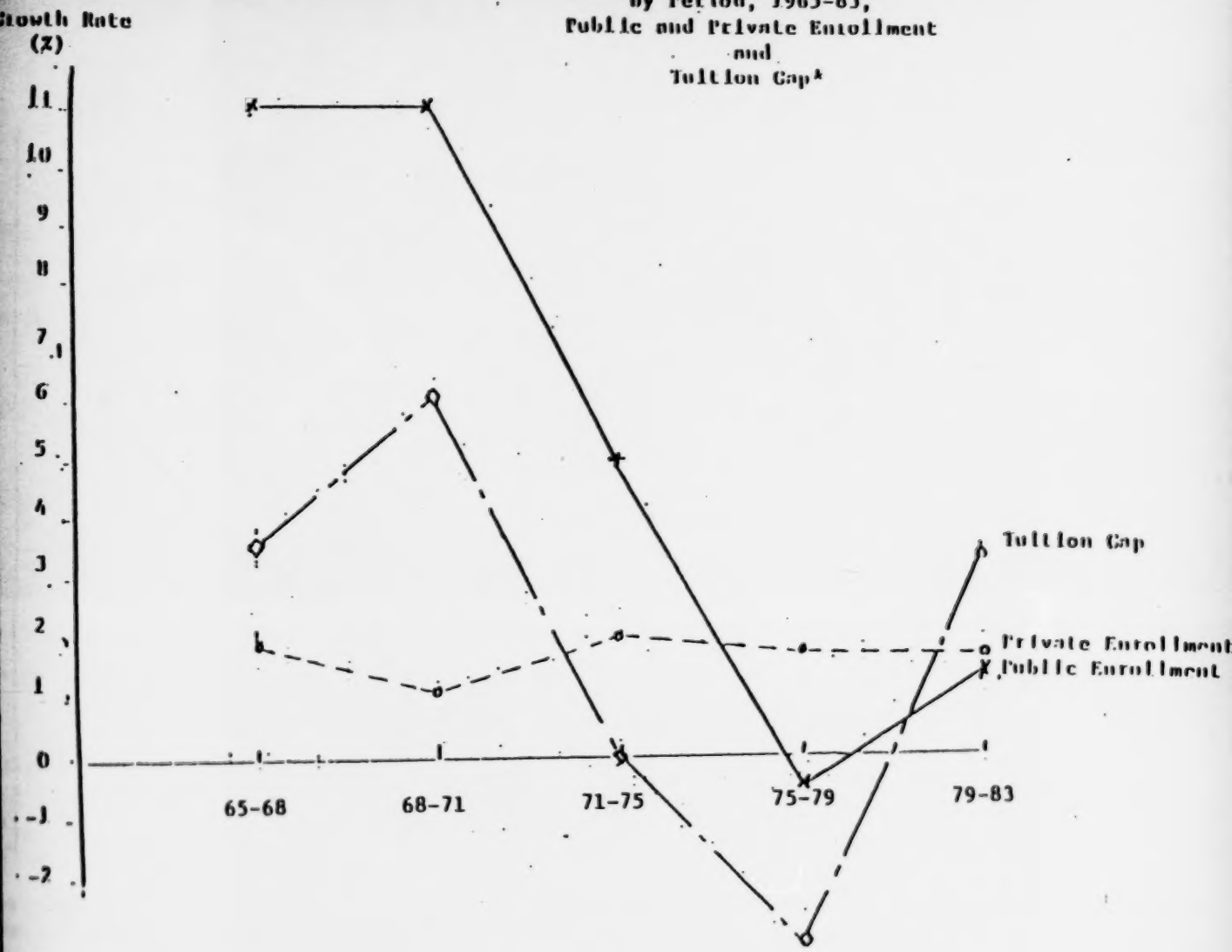
Annual Average Growth Rates
by Period, 1965-83,
Public and Private Enrollment
and
Tuition Cap*

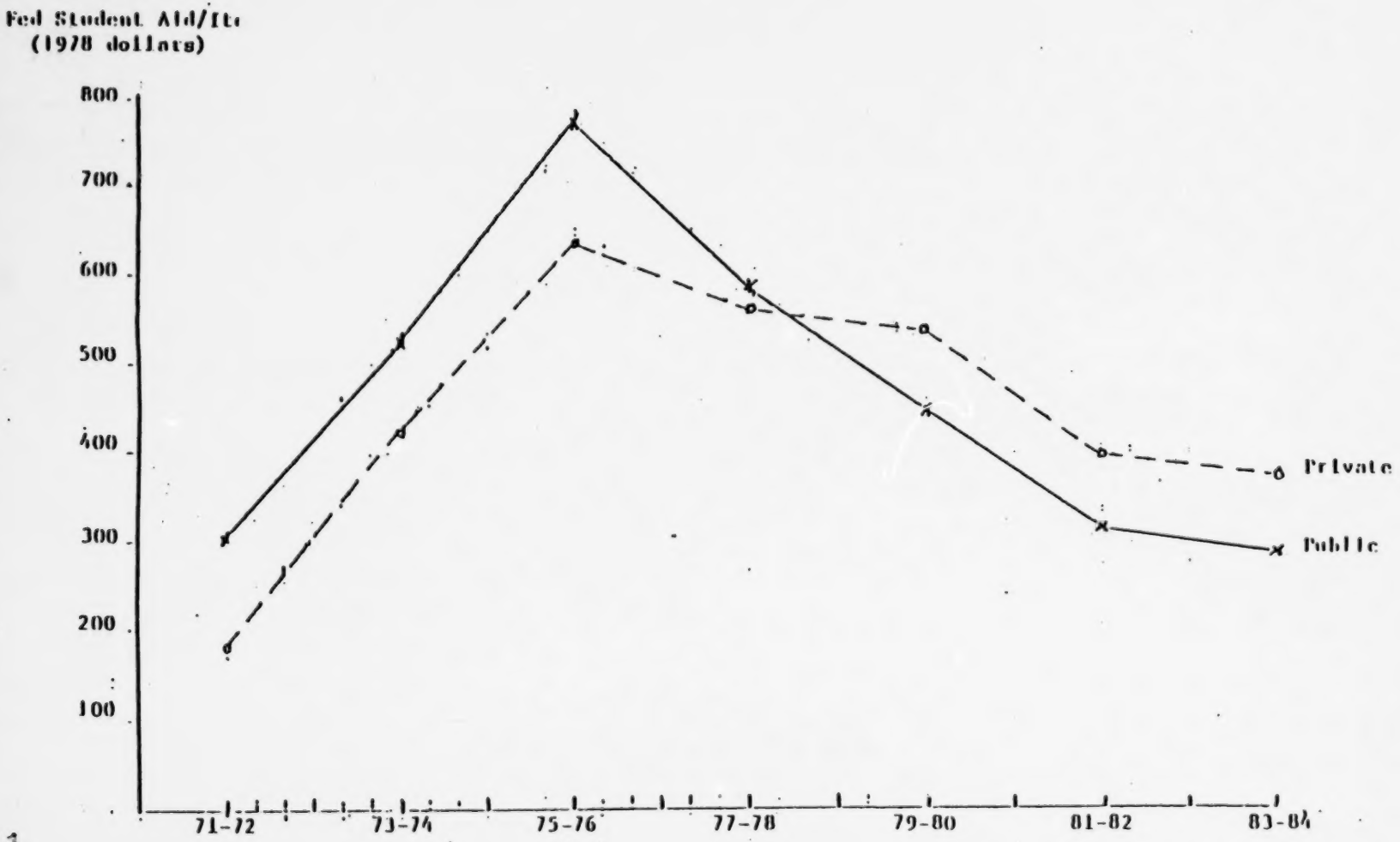


* Gross tuition revenue less federal student aid per f-t-e enrollment, 1978 dollars. For 1965 and 1968, federal student aid figures omitted.

Figure 2

Federal Student Aid Per F-t-e Enrollment

1971-72 thru 1983-84



NASSGP-NCHELP
Research Conference
Loyola University, Chicago

Reginald Wilson
American Council on Education
May 29, 1986

OVERVIEW OF THE ISSUE: MINORITY/POVERTY STUDENT ENROLLMENT PROBLEM

The percentage of black and Hispanic high school graduates attending postsecondary institutions peaked in 1976 and has been declining ever since, a phenomenon that has been well documented by studies published by our office at the American Council on Education and by many other researchers. It is true that there has been a slight overall decline in participation rates in college attendance but the decline of the poor and of minorities has been precipitous and alarming. And that decline has been most marked for black students and, among them, for black males. The ripple effect for blacks especially can be seen at all levels of higher education - in the graduate schools, in faculties, and in university administration.

White undergraduates declined by approximately 1 percent, black by 5 percent, and Hispanic by 6 percent in participation rates between 1975 and 1985. Considering that minorities never reached parity at their peak participation, those declines are disturbing. Black graduate students declined by 8.3 percent between 1976 and 1980. Black faculty between 1979 and 1981 declined from 4.3 to 4.2 percent (while recognizing that half of those faculty were already in the historically black colleges). Hispanic faculty plateaued at 1.5 and 1.6 percent, respectively, during the same period. Native Americans remained the same and only Asians, among minorities, increased participation rates at all levels during this period. Since blacks and Hispanics collectively account for over 85 percent of minorities, the use of the term minority in these remarks will essentially apply to these two groups.

The factors contributing to the success in postsecondary education of poor, disadvantaged and minority students are multiple. Among those factors student financial aid is only one, however, a very important one. Other factors of importance that we will briefly discuss are:

1. Increased segregation by race and class
2. Poor secondary school preparation and rising standards
3. Increased impoverishment of lower class and minorities

Segregation by Race and Class

Black students in major urban areas are now more segregated than before the Brown decision. At the time of Brown only 3 of the largest 25 cities had public school systems in which the majority of pupils were minority. By 1985 all 25 were majority minority. By the year 2000 demographers estimate that the 53 largest cities will all have public school systems in which the majority of pupils is minority.

In 1971, the Supreme Court denied a metropolitan desegregation solution in Detroit in the Bradley v Milliken case. In 1986, the Court ended busing in Norfolk, Virginia, "irrespective of the racial consequences." As a result, desegregation becomes increasingly irrelevant and big city school systems will be overwhelmingly black and Hispanic for the foreseeable future.

And yet, minority students are increasingly attending predominantly white postsecondary institutions. For example, as recently as 1952 there was not a single undergraduate black student in any traditionally white public institution in the South; and as recently as 1965, 65 percent of black students still attended historically black institutions. However, by 1982, 70 percent of black students in the South were in predominantly white colleges and 80 percent were so in the nation overall. Less than 20 percent of blacks attend historically black colleges in 1986.

In addition, a fact of desegregation that is usually overlooked is segregation by class. An artifact of past segregation and restrictive housing codes in big cities was that minority communities were heterogeneous by class and income groups. With desegregation, the black middle class, like the white middle class, has moved substantially to the suburbs and their children to private schools. As a result, the inner-cities are more impoverished and homogeneous in composition and the inner-city lacks role models and competitive levels in the schools and in the community. See the Atlantic, "The Making of the Underclass."

Poor Secondary School Preparation and Rising Standards

The quality of education in inner-city secondary schools is poorer than that in suburban schools and, thus, even the better graduates of inner-city schools are less competitive in postsecondary education than their suburban peers. Indeed, minority high school graduates indicate a significantly higher need for remedial assistance upon registering for college than do white students (Chart I). One third of blacks and Hispanics request help with study skills compared to 22 percent of whites. Similar percentages request help in Math and English. Therefore, there is a demonstrated need for remedial and compensatory education, at the same time that both the

states and the Federal government are decreasing funding for these assistance programs.

The need for remedial assistance by minorities has been compounded by the recent "movement for excellence" in the schools. Although the public initiative of the movement preceded the publication of A Nation at Risk in 1983, that publication certainly accelerated the demand for raising standards in both secondary and postsecondary institutions. As of mid-1985, 39 states require passage of minimum competency tests of basic skills, 20 states require passage of a high school proficiency test as a condition of graduation, and 30 states have increased their admission standards to state colleges and universities. Minority and poor students generally do less well on standardized tests than white students despite improvements in minority test performance during the past few years. Preliminary test results indicate that minority students are being inordinately affected by these new requirements. The raising of standards at the same time that funding for remedial and compensatory programs is being cut is a built-in prescription for failure.

The Increased Impoverishment of the Lower Class and Minorities

The economic and educational philosophy and policies of the Reagan administration have been clear, consistent, and successful during the past 5-1/2 years. The economic philosophy postulated that a cut in taxes would increase investment and revitalize the economy, ultimately benefitting everyone. The educational philosophy stressed "self-help," the reduction of the Federal role and the shifting of the financial burden of higher education to families and the states.

The consequence of both economic and educational policies of the administration has been the impoverishment of the lower income groups and decreased access to higher education for poor and minority people. Between 1980 and 1984, the share of national income of the highest 1/5 of the population increased from 40 to 43 percent. The share for the lowest 1/5 of the population declined from 4.9 to 4.7 percent. In 1980, families in poverty paid 2 percent of their income in Federal taxes. In 1984, poverty families were paying 10 percent of their income in Federal taxes. Between 1980 and 1984 total financial aid in constant dollars declined by 19 percent (Chart II). Between 1980 and 1984, grants as a portion of total financial aid declined from 55 to 41 percent. Between 1978 and 1983, college tuition increased by 12 percent, and in the decade 1975 to 1985, tuition increased by 95 percent. The poor and minorities have been priced and impoverished out of higher education.

Reagonomics has been enormously successful in achieving most of its goals. It has enriched the upper classes, gutted most of the social programs of the 1960s and 1970s, impoverished the lower

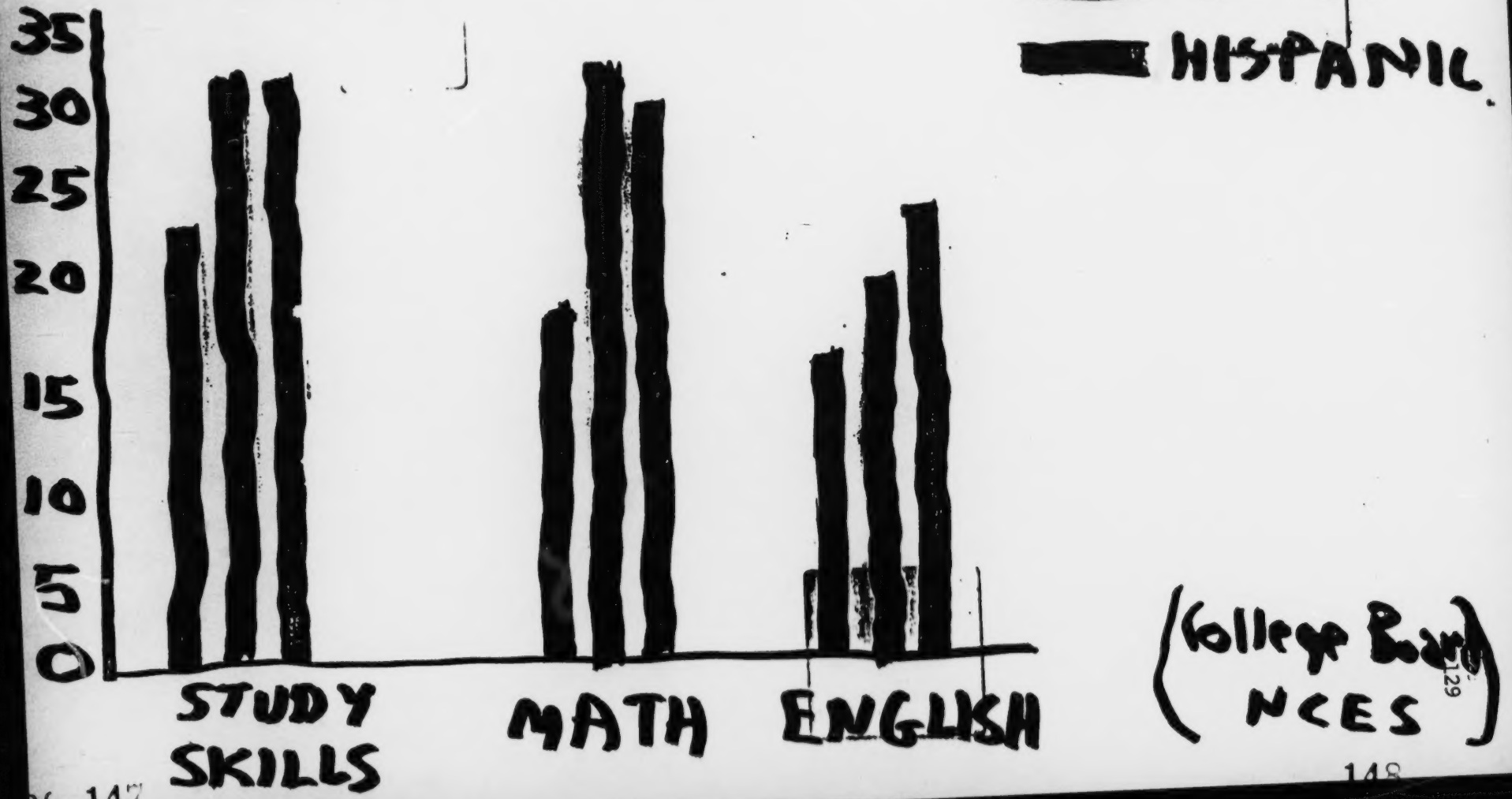
classes, and created a climate of opposition to equity and social justice that has received the overwhelming endorsement of the American public. The bizarre nature of higher education lobbying in Washington, DC is that we no longer speak of victories as advances - we speak of victories as "less worse" defeats. For instance, take the most recent "victory" in lobbying last month. Gramm-Rudman-Hollings removed $4.3 billion from education funding this spring. After massive lobbying by the associations and with the American Council on Education bringing in 50 college presidents to lobby their senators, we got the $4.3 billion put back in. That effort warranted front page treatment in the Chronicle of Higher Education and the celebration at One Dupont Circle was just short of obscene. So much for the definition of victory.

Conclusion

It is true that the enrollment decline of poor and minority students is due to multiple factors among which student financial aid is a very important one. Research by Nettles and his associates cite other significant factors contributing to college success, among them being: high SAT, high High School GPA, living on campus, high socio-economic status, attending a private high school, and being in the racial majority on campus. All of these predictive factors are atypical of minority students. Thus, the lack of financial assistance compounds a multiplicity of other obstacles that minority students must overcome to achieve success in postsecondary education.

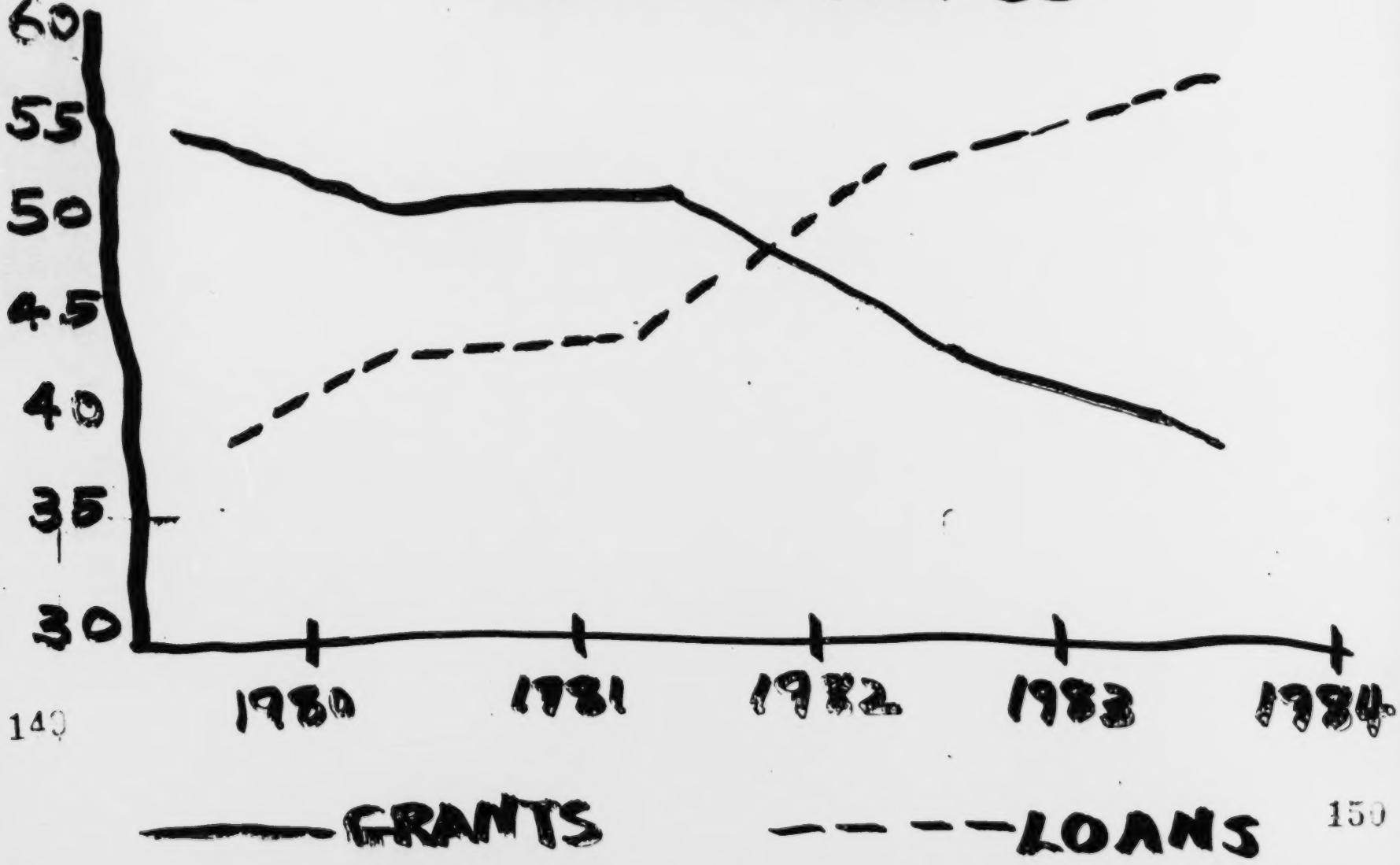
Some states have begun to recognize the magnitude of the problem and are initiating efforts, with varying degrees of comprehensiveness, to address it. Some of those state reports you will hear today. At the American Council on Education we are initiating a survey of state efforts to increase minority participation. We hope the consequences of those efforts will impact on the disturbing trends we have documented over the past several years and give us some basis for optimism. There is little reason for such optimism at the moment.

HIGH SCHOOL GRADUATES PLAN TO ASK EXTRA HELP IN COLLEGE - 1984



(College Board NCES)

GRANTS & LOANS AS % OF TOTAL AID
1980-81 to 1984-85



DIRECTOR'S REPORT

December 1985

CALIFORNIA
POSTSECONDARY
EDUCATION
COMMISSION

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

Director's Report
December 1985

FROM NINTH GRADE THROUGH COLLEGE GRADUATION

Who Makes It in California Education

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION
Second Floor • 1020 Twelfth Street • Sacramento, California 95814

COMMISSION REPORT 85-36
DECEMBER 1985

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Pathways and Problems

CALIFORNIA'S system of public colleges and universities that resulted from the 1960 Master Plan for Higher Education clearly represents a singular social and cultural achievement. It has become the most widely respected and imitated model for public higher education in the nation; it has made possible one of the highest college participation rates of any state; and complemented by a large number of independent colleges and universities, it provides a degree of access and choice to its citizens unparalleled anywhere:

- The California State University, which traces its origin back to the creation of San Francisco's normal school in 1862, enrolled nearly 325,000 students on its 19 campuses in Fall 1985.
- The University of California has developed from modest beginnings in Oakland in 1868 into a world-renowned nine-campus system enrolling some 147,500 students.
- And the California Community Colleges with their vast array of course offerings for diverse constituents, have grown to 106 colleges that provided a wide range of educational opportunities to more than 1.1 million people in Fall 1985.

Despite these achievements, however, problems of access, retention, and quality remain:

- At least one-fourth of California's ninth graders do not complete their high school studies or graduate with their class and thus are not eligible to apply to the University of California, the California State University, or most independent colleges and universities in California.
- The dropout rate for Black and Hispanic youth from high school is 50 percent greater than for white students.
- Black and Hispanic high school graduates are far less likely than white graduates to be eligible for regular admission to the University of California.
- Hispanic students who are eligible to attend the University are far less likely to go to college than any other ethnic group, and those who do enroll are more likely to attend the State University or a Community College than the University.
- The number of minority students enrolling at the University of California and the California State University remains low, although it has increased in recent years, and the number graduating has not increased as fast as the number enrolling.
- Approximately one-half of all Black and Hispanic first-time freshmen at both the University and the State University do not meet the requirements for regular admission at these institutions and are enrolled as "special-admission" students; but only one in every five special admission students at the University graduate within five years; and only one in every ten do so at the State University.

To provide perspective on these problems, this report looks at student paths through high school and college in California and the factors that influence students' enrollment behavior.

Part One begins with the often difficult transition from eighth to ninth grade and reports what happened to California's 1979-80 public school ninth graders over the next four years and how many of them graduated from high school in 1983.

Part Two examines the characteristics of those graduates who were eligible for admission to California's two public universities.

Part Three reviews the factors that influence decisions about whether or not to attend college and where to enroll.

Part Four describes who actually enrolled in college from the Class of 1983.

Part Five analyzes patterns of dropping out and transferring during the undergraduate years.

Part Six summarizes the characteristics of University and State University graduates, in light of the students who are eligible to attend and who enroll.

And Part Seven raises questions for consideration by policy makers regarding the problems identified in the previous sections.

ONE From Ninth Grade Through High School

IN 1979-80, 335,209 California youth entered the ninth grade in the State's public schools. Reflecting California's great ethnic and socioeconomic diversity, they included 209,291 whites, 69,748 Hispanics, 34,936 Blacks, 13,667 Asians, 4,335 Filipinos, and 3,232 American Indians. Their families ranged from wealthy to financially destitute and from long-time Californians to newly arrived Asian refugees and Hispanic immigrants.

Their academic preparation for high school had begun in the elementary schools, where most educators feel that students' habits, interests, and attitudes toward schooling are formed. By the middle-school years, many students had already developed the reading and computational skills, study habits, self assurance, and support groups of family and friends needed to adjust successfully to the increasing demands of the junior high school years and make a smooth transition into high school. But others were not as fortunate. Simply the size and complexity of junior high can be confusing and intimidating. Coping with hundreds, if not thousands, of other students, changing classes and teachers six or seven times a day, balancing the multiple time demands of courses, completing homework assignments, even remembering locker combinations and keeping track of books and other supplies, not to mention the other stresses accompanying the early teen years, proved difficult for some. Based on their experiences thus far, more than a few had already decided that school was not for them.

Counseling and curricular tracking in high school

These ninth graders found their high school curriculum was generally structured into three distinct patterns of courses or tracks: (1) a vocational track emphasizing job skills, (2) a loosely structured general track for those who had not expressed an interest in higher education including remedial courses for those who were a grade or more behind their colleagues in reading and mathematics skills, and (3) a tightly structured college-preparatory track that often includes honors courses for high-achieving students. Decisions at this time about which track to take have major implications for students' later education and career options, since changing from the vocational or general track to the college-preparatory track becomes increasingly difficult during the ensuing four years.

The nature and quality of the counseling that students receive at the end of eighth grade is thus highly important in helping them plan their courses for the ninth grade and beyond. So are the early outreach efforts designed by colleges and universities to urge ninth graders to consider college as a real option and to take the four-year sequence of courses required for entry into selective public and independent colleges and universities. Not all students are ready academically to benefit from such efforts, however, and many never enter the college-preparatory track.

The choice that students make among these high school tracks are directly related to their past academic achievement; and their performance on standardized tests measuring vocabulary, reading, and mathematics skills; and the counseling they receive. According to unpublished data from the National Center for Education Statistics (1982), over 72 percent of high school students rated high in academic ability were enrolled in the academic track and only 8 percent in the vocational track, but less than 14 percent of those rated low in academic ability were in the academic track, while 39 percent were enrolled in vocational courses.

Students' academic performance and choice of track are also affected by parental education, family income, parents' occupations, and other socioeconomic factors. For example, according to the National Center for Education Statistics, 62 percent of students from families rated high in terms of socioeconomic status were enrolled in the academic or college-preparatory track, compared to just 21 percent from low-income disadvantaged families. Furthermore, among Black high school seniors in the class of 1980, 67 percent were enrolled in a non-academic track, as were 40 percent of Hispanic students. No comparable figures for California are available to the Post-

secondary Education Commission, but from the Commission's 1983 High School Eligibility Study it is evident that far fewer Black and Hispanic students enroll in college-preparatory courses in California high schools than do white or Asian students.

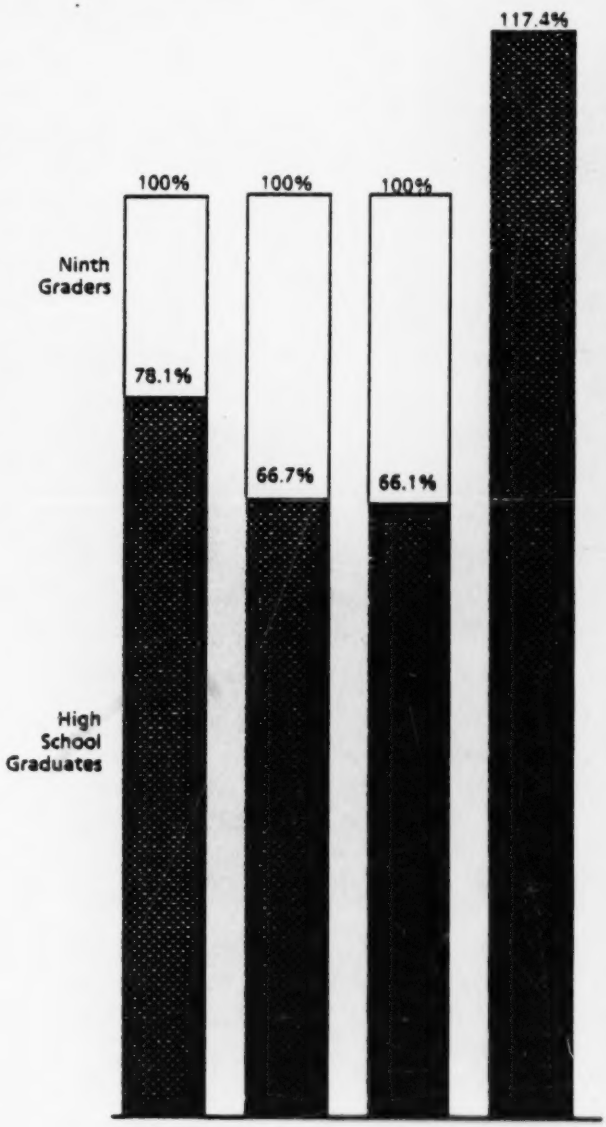
Chances of dropping out

California's high school dropout rate is higher than the national average. Nationally, 28 percent of ninth graders in 1980-81 did not complete their high school studies or graduate with their class, according to the National Center for Education Statistics -- 4 percentage points lower than California's average of 32 percent in 1980-81 and 3 points lower than California's 1982-83 average, according to the California Assembly Office of Research (1985). Data from the California State Department of Education indicate that only 254,944 young people graduated from California's public high schools in 1982-83, compared to the 335,209 who enrolled in the ninth grade four years earlier, but this loss of 80,256 students over the four years -- a decline of 24 percent -- understates the magnitude of California's dropout problem for several reasons:

- The immigration of many young people to California in the tenth, eleventh, and twelfth grades from other states as well as Asia, Mexico, Latin America, and other regions lowers the net losses implicit in these figures.
- Second, more private school students transfer into public high schools during these years than transfer from public to private schools.
- Third, at least some dropouts left school even before the ninth grade.
- And fourth, the figures for public high school graduates in 1982-83 included graduates from continuation and adult schools -- students who were probably not ninth graders in 1979-80 -- and the effect of this is to perhaps understate the magnitude of the dropout problem. Whatever the exact number of dropouts, this range of estimates shows clearly that the State confronts a major problem.

For some ethnic groups, the dropout rate is far higher than the average of 24 percent, as Display 1 at the right shows: 40 percent among American Indian students, 33 percent for Black students, and at least 34 percent for Hispanic students, although their

DISPLAY 1 California high school graduates in 1982-83 as a percentage of California ninth graders in 1979-80, by major ethnic group



	White	Black	Hispanic*	Asian*
Ninth Graders	209,291	34,936	69,748	13,667
Graduates	163,470	23,288	46,081	16,042

* The percentage that these high school graduates are of ninth graders is probably enlarged because of the immigration to California of high school-age young people in this group.

Source: California Postsecondary Education Commission staff analysis, based on the California Basic Education Data System of the California State Department of Education and the Commission's 1983 High School Eligibility Study.

known immigration suggests that their dropout rate is certainly higher than 34 percent. (The dropout rate of Asian students is unknown because immigration produced a 17 percent increase in Asian students over these four years and because California lacks adequate follow-up statistics on what happens to its students.)

Low-income and disadvantaged youth of all ethnic groups are disproportionately represented among the ranks of the dropouts, as are those whose parents and siblings have limited education, and those confronted with other family problems and the pressures in large inner-city schools. The most frequently cited characteristics of dropouts include:

- Being held back a grade or more;
- Reading two or more years below grade level;
- Poor mathematics skills;
- Little or no participation in school activities;
- Pregnancy;
- Social isolation;
- Disruptive behavior in school, including trouble with rules or conflict with teachers and staff;
- Changing schools several times; and
- Poor attendance.

The three critical periods when most dropouts decide to leave school are during junior high school, at about age 16, and just before high school graduation. Some students never earn their high school diploma. Others decide to complete the high school courses in summer school, adult school, or a Community College, while still others complete their work through a General Education Diploma (GED) program. In the early 1980s, insufficient State revenues led to the elimination of summer school in most districts and probably contributed significantly to the rising dropout rate.

Consequences of dropping out

The consequences for society and for those dropouts who fail to earn a high school diploma through alternative means are serious:

- The median level of education of prisoners in California's jails and prisons is the eighth grade.
- The unemployment rate for high school dropouts is two to three times higher than the rate for high school graduates.
- One recent study by the California Employment Development Department found that two-thirds of young dropouts were unemployed and that those who were working could expect to earn 7 to 21 percent less per hour than high school graduates. Moreover, this earnings gap widens with age. A University of California study revealed that recent dropouts could expect to earn only 70 percent of high school graduates' lifetime earnings (Stern, 1984, p. 22).
- Many dropouts end up on welfare. The Assembly Office of Research found that 45 percent of Black, 30 percent of Hispanic, and 31 percent of white girls cite pregnancy as the reason they dropped out. Other statistics show that nearly one-third of California families receiving Aid for Families with Dependent Children (AFDC) have a head of household who did not complete high school, and the Rand Corporation found in 1976 that 99 percent of all California families headed by women who did not complete high school were receiving AFDC benefits.

Nationally, the *New York Times* reports, "about 13.8 million, or 22 percent of Americans under the age of 18 live in poverty, up from 14.3 percent in 1969-70" (October 20, 1985). It indicates that 48 percent of the nation's Black children live in poverty, and more than half of all poor children live in families headed by women. The *Times* concludes, "Complex social, economic, and political factors are creating a vast new class of poor Americans who are much younger, less educated and likely to give birth sooner than recent generations of the poor."

What is happening nationally is also happening in California and California's schools and colleges must be part of the solution to this growing problem.

TWO The Class of 1983 and Eligibility to Attend California's Public Universities

Characteristics of the Class of '83

The effects of dropping out in high school are evident in the composition of California's high school graduating class of 1983. Black graduates accounted for only 9.1 percent of the total, compared to 10.4 percent of ninth graders four years earlier. Hispanics accounted for 18 percent of the graduates, compared to nearly 21 percent of the ninth graders in 1979-80. American Indian graduates made up 0.8 percent of the class, compared to 1.0 percent of the ninth graders. In contrast, Asian and white graduates formed a larger proportion of the graduating class than of ninth graders -- Asian graduates, 6.3 percent, compared to 4.1 percent of ninth graders; and white graduates, 64.0 percent, compared to 62.0 percent of the ninth grade class.

Not only do students from different ethnic backgrounds -- and thus socioeconomic circumstances -- differ in their likelihood of graduating from high school, they also differ along the same lines in their eligibility for freshman admission to California's two public universities.

Graduates eligible for University of California admission

To achieve eligibility for freshman admission to the University of California, high school graduates need either to (1) complete the required sequence of academic course work with a grade-point average of 3.3 or higher; (2) qualify for regular admission using a combination of test scores and grade-point averages between 2.78 and 3.29 in required academic courses, or (3) score a total of at least 1,100 on the Scholastic Aptitude Test plus 1,650 on three College Board Achievement Tests with a minimum score of 500 on each of the three.

About one out of every seven graduates in the class of 1983 was ineligible for the University either because of failing to take one or more of the required courses or receiving less than a C grade in one of them, and three out of every four were ineligible because they were not enrolled in University-track courses in high school or had academic deficiencies in those courses they did take.

Overall, an estimated 13.2 percent of California's public high school graduates in 1983 completed all of the required courses and admissions tests at the level of competency required to be eligible for regular admission to the University. Among male graduates, 12.6 percent were eligible, or about one out of every eight male graduates, compared to 14.2 percent of female graduates, or approximately one out of every seven.

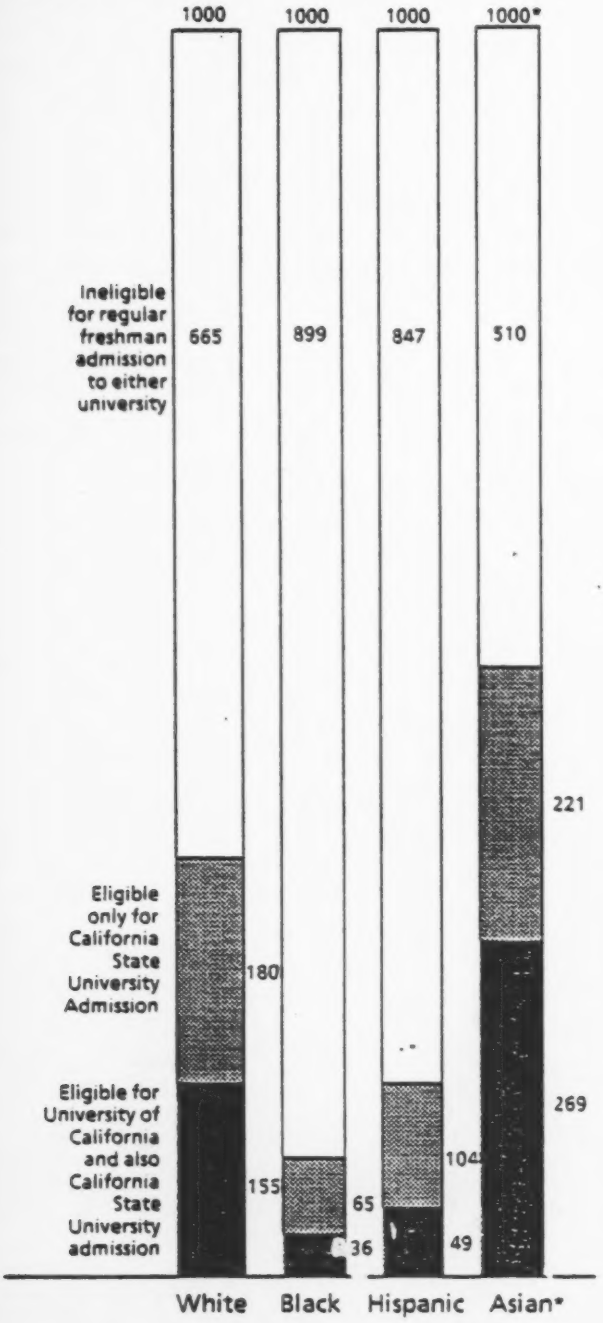
Among major ethnic groups, eligibility rates varied widely. Only 838, or 3.6 percent, of California's 23,238 Black public high school graduates were eligible for regular admission to the University, compared to 13.2 percent of all graduates. Just 2,258, or 4.9 percent, of the 43,823 Hispanic graduates completed all the requirements needed to be eligible for the University, as did 25,338, or 15.5 percent, of the 163,470 white graduates, and 4,171, or 26.9 percent, of the 16,043 Asian graduates.

Display 2 on the next page portrays these rates by using 1,000 high school graduates of each ethnic group and showing how many of them were eligible for freshman admission. As can be seen at the gray areas near the bottom of the columns, 155 of every 1,000 white graduates were eligible for admission, compared to 36 Black graduates, 49 Hispanic graduates, and 269 Asian graduates.

Graduates eligible for State University admission

According to the Master Plan, the State University is supposed to admit students from among only the top one-third of California's high school graduates. To achieve eligibility in 1983, graduates had to either earn a cumulative grade-point average of more than 3.2 or else -- if their grade-point average was between 2.0 and 3.2 -- score high on a standardized admissions test.

DISPLAY 2 Eligibility rates of California 1983 high school graduates, by major ethnic group



* The high school dropout rate of Asian students is unknown because of extensive immigration of Asian high-school-age youth. Numbers of Asian students are based on every 1,000 high school graduates rather than ninth graders.

Source: California Postsecondary Education staff analysis of California State Department of Education and segmental data.

Overall, 29.2 percent of the class of 1983 were clearly eligible for admission to the State University, including the 13.2 percent eligible for regular admission to the University. Thus, those above-average achievers eligible to attend only the State University comprised 16.0 percent of the class. Among male graduates, the eligibility rate was 13.8 percent, while among women it was 18.5 percent. Just 6.5 percent of the State's Black public high school graduates were eligible for regular admission only to the State University, compared to 10.4 percent of the Hispanic, 18 percent of white, and over 22 percent of Asian graduates.

There were also marked differences among major ethnic groups in the reasons for their ineligibility.

- Overall, 42 percent of the class had grade-point averages between 2.0 and 3.2 but were ineligible for regular admission to either of the four-year public segments because they failed to take the required tests needed to establish their eligibility. Over half of all Hispanic graduates possessed grade-point averages within this range, but failed to take the required tests. Whether this stemmed from their erroneous perceptions of their eligibility chances or from other career and life plans is uncertain at this time.
- An additional 11 percent of all graduates had grade-point averages between 2.0 and 3.2 and took the tests, but their combined scores were too low to qualify for regular admission to either the University or the State University. Over 18 percent of all Asian and more than 15 percent of all Black graduates were ineligible for this reason.
- Finally, 17 percent of the class were ineligible because of extremely low grades and other subject-matter deficiencies in high school. Few Asian or white graduates were ineligible because of grade-point averages below 2.0, but more than one out of every four Hispanic graduates, and more than one out of every three Black graduates had grade-point averages this low.

As can be seen from Display 2, of every 1,000 white graduates, 180 were eligible for admission to only the State University, compared to 65 Black graduates, 104 Hispanic graduates, and 221 Asian graduates. This left 665 of the white graduates, 899 of the Black graduates, 847 of the Hispanic graduates, and 510 of the Asian graduates ineligible for freshman admission to either university.

THREE Factors Affecting College Enrollment

ACCORDING to research on college enrollment, five factors are most significant in influencing both the probability that students attend college and their decision of what type of college to attend:

1. their academic achievement;
2. their families' income;
3. their parents' education;
4. the cost of attending particular institutions; and
5. institutional selectivity in admissions.

Prior academic achievement and socioeconomic characteristics have stronger effects on the probability of attending college than institutional costs or financial aid, but all these factors influence enrollment decisions. By itself, race or ethnicity is not a significant factor in these decisions. The primary reason for such great discrepancies as those reported here among young people of different ethnic backgrounds is that for a multitude of reasons, ethnic groups differ on other significant factors such as family income, parental education, and the quality of early schooling (Terkela and Jackson, 1984).

The impact of academic achievement and socioeconomic status

The likelihood that students will apply for admission to a four-year college or university is related significantly to the students' high school class rank, Scholastic Aptitute Test scores, parents' education, and, to a lesser extent, parents' income, according to Manski and Wise (1983). These same factors also increase the likelihood of the students' actually enrolling in college, once they apply for admission.

Studies such as that of Manski and Wise tend to show that students' high school class rank, grade-point average, and SAT scores are all closely related to students' socioeconomic status. Parental education and income, ethnicity, neighborhood, high school quality, and the characteristics of students' friends and peers are often also closely related. As a result, the separate effects of certain factors on eligibility, applying for admission to a four-year institution, enrolling, dropping out, and earning a degree all tend to reinforce one another.

Generally, California's high school graduates in the Class of 1983 fell into one of three categories in terms of their eligibility for freshman admission to the State's public universities:

1. High-achieving students who were eligible for regular admission to the University of California.
2. Above-average achievers who were eligible for admission only to the California State University; and
3. Modest- to low-achieving graduates who were ineligible for regular admission to either the University or State University.

Not surprisingly, high achieving students have the greatest range of higher education options available to them. Institutional selectivity and cost are factors in their decision, to be sure, but in general, the question for them is not whether to attend college, but which college to attend.

Above-average-achieving students, the group that generally corresponds to those eligible for regular admission to the State University, but not the University, also tend to be in the "which" rather than "whether" group, but their options tend to be more limited by institutional selectivity and other factors. Low- and modest-achieving students naturally face the most restricted range of postsecondary options. While some of them have some choice, this group is for the most part limited initially to choosing either to attend college or enter the work force, a job-training program, or the armed services. Among high school dropouts, the only postsecondary options are adult schools, vocational training programs at proprietary institutions, or attendance at their local Community College. For many in this group, direct entry into the work force may appear to be the most attractive or viable option.

The impact of cost

The one universal finding from studies of factors affecting enrollment is that the cost of attending a particular institution does affect access. Every study finds a small but significant negative relationship between the price faced by students and their probability of attendance. At the same time, the impact of price is not the same for all students at all institutions, for several reasons:

- First, students from low-income families are more affected by price changes than those from high-income families, although providing additional financial aid to low-income students can help offset these differences.
- Second, high-achieving students are less sensitive to changes in cost than other students, in part because they are generally more sophisticated consumers of higher education and quite likely to graduate.
- Third, the impact on enrollment of even a $100 increase in costs at a low-priced college is much greater than it is at a high-priced institution.
- Fourth, price changes may lead to enrollment shifts between public and independent institutions or between segments in the public sphere.

Complicating these general relationships is the fact that at least two price systems in higher education affect student enrollment:

One is the "posted" price -- the student's full cost of attendance, without considering financial aid. For example, it cost approximately $2,900 for students in the class of 1983 to attend a California Community College, even though the Community Colleges charged no statewide mandatory fees in Fall 1983. It cost about $4,900 to attend a State University, $6,600 to go to the University, and around $11,300 to enroll at an independent institution. These posted prices, including tuition and required fees, living costs, and books and supplies, have their greatest impact on students' application decisions because at the time students are trying to decide which institutions they are qualified to attend and can afford, they do not know whether they will qualify for financial aid or, if they do, how much aid they may receive. Moreover, the price tag is what most low-income students react to in determining whether they can afford to attend college regardless of their high eligibility for student aid at most institutions.

The other price system affecting student enrollment in college is the "net" price -- the full cost of attendance minus any financial aid. Since many students do not actually pay the full posted price because they receive financial aid, this net price has a significant impact on which institution students eventually decide to attend. Yet, the effectiveness of aid in offsetting college costs depends, in part, on the form of aid provided:

- Grant assistance seems to be the most effective in offsetting college costs almost dollar for dollar among the most price responsive students -- those from low-income families.
- Offers of work assistance, such as through the federal College Work Study program, are important but somewhat less effective in offsetting college costs. Moreover, while work assistance may promote persistence, the need to hold part-time jobs may slow students' academic progress by forcing them to reduce their unit loads. At the same time, however, it is a very attractive way to reduce the increasing reliance on loans and rising student indebtedness, especially if the jobs are closely related to the students' eventual careers.
- Finally, Guaranteed Student Loans and other loans at below-market interest rates have played an increasingly important role in financing college education in recent years, but they appear somewhat less effective in offsetting college costs than either grant or work aid for low-income students. Furthermore, the current heavy dependence on loans for financing education is a cause for concern because of the potential impact of high indebtedness on students' career choices and their ability to participate in other aspects of the society and its economy.

The levels of student charges, overall college costs, and financial aid are all factors in either promoting or limiting access, choice, and educational quality, but they are not the only, or even the most important, factors influencing student enrollment decisions. They are the factors most readily influenced by public policy makers, but the other personal and institutional factors identified earlier more directly shape college going in California.

The impact of institutional selectivity on college choices

Those California high school graduates considering attending postsecondary education institutions have a wide range of choices available to them, including the nine University of California campuses, 19 State University campuses, 106 Community Colleges, nearly 350 independent colleges and universities ranging from large comprehensive research universities to small liberal arts colleges, and from highly selective nationally prestigious institutions to relatively non-selective ones, and hundreds of proprietary and vocational training schools. In addition, perhaps 5 to 10 percent of California's high school graduates choose to attend out-of-state institutions ranging from public institutions in neighboring states to elite eastern private colleges and universities.

Of California's 262,160 public and private high school graduates in 1983, nearly 178,000 attended some postsecondary institution immediately following high school graduation. That fall, 18,323 of them enrolled on either a regular or special-admission basis in the University of California; 23,250 were admitted to the State University; 98,390 attended California's Community Colleges; 8,914 attended independent institutions; slightly more than 13,400, or 5 percent, enrolled in out-of-state institutions; and some 15,700, or 6 percent, appear to have enrolled in vocational programs at proprietary schools or adult schools within California. These figures suggest that more than 84,000 of the graduates – or almost one-third – did not continue their studies immediately after high school.

The vast majority of graduates applied to only one college, generally schools in their immediate local area. Those who applied to two or more institutions tend to include large numbers of extremely high achievers, and they often applied to selective public and private institutions both in California and elsewhere.

The information on the actual enrollment behavior of California high school graduates in the Class of 1983 comes from an initial follow-up survey sent to all the graduates in the Commission's eligibility study sample.*

* One-fourth of the 13,860 public high school graduates in the eligibility study sample responded to this first follow-up survey. The response rate was higher among University and State University eligible graduates than among non-eligible graduates, which would clearly affect certain analyses, but not the range of choices made by the three eligibility groups, which is the subject of this current analysis.

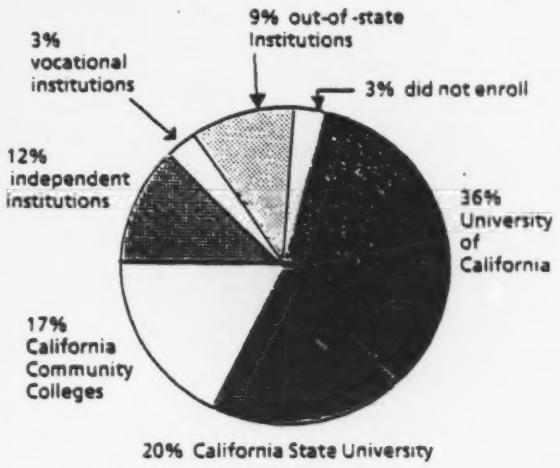
Enrollment choices of high-achieving graduates

The 33,650 graduates of the Class of 1983 who were eligible for regular admission to the University obviously had the greatest range of postsecondary choices. They were most likely to attend a selective four-year college or university. As Display 3 on page 8 shows, less than 3 percent of the high-achieving graduates who responded to the survey reported that they did not enroll in college the fall term after high school graduation. Over 36 percent enrolled in the University of California, 20 percent enrolled in the California State University, 17 percent enrolled in Community Colleges, almost 12 percent attended the State's independent institutions, 9 percent enrolled at an out-of-State institution, and the remaining 3 percent attended vocational or technical schools.

The sex of these high-achieving graduates seemed to make a difference in some of the postsecondary options they selected. Men accounted for nearly 60 percent of those who attended out-of-state institutions, while women were disproportionately represented among those who enrolled in the State University, Community Colleges, or vocational schools.

Among major ethnic groups, the number of Black high-achieving respondents to the Commission's survey was quite limited, but these few students were more likely to enroll in the University of California than those from any other ethnic group except Asian students. High-achieving Hispanic students, on the other hand, were much more likely than any other ethnic group to enroll at a State University or a Community College. High-achieving white students were the most mobile of all. While the largest group of them enrolled in the University, they were also represented among the full range of institutions and were slightly more likely to enroll in independent institutions or out of state than any other ethnic group. Variations in the grade-point averages and SAT test scores of high-achieving graduates were also important factors in shaping the subsequent enrollment choices of this select group. Seven out of every ten of these high achievers in the follow-up sample who enrolled at independent colleges and universities in California had grade-point averages of 3.5 or better,

DISPLAY 3 Enrollment choices of high academic achieving graduates of the high school class of 1983



Source: California Postsecondary Education Commission staff analysis of data from the first follow-up survey of graduates in the Commission's 1983 High School Eligibility Study.

and the same percentage had total scores on the SAT test of 1,000 or more, including three out of every ten with total scores above 1,200. Clearly the highly selective, prestigious independent institutions were still able to compete successfully with the University and highly selective out-of-state institutions for California's high school graduates with outstanding academic records. In general, the out-of-state institutions attended by high achievers were among the most highly selective in the country, including Harvard, Yale, Princeton, Johns Hopkins, Chicago, and MIT. Furthermore, more than six out of every ten of these students who went to out-of-state institutions had at least a 3.5 high school grade-point average, nine out of ten scored 1,000 or better on the SAT, and nearly four in ten had SAT scores of at least 1,200.

Among the high achievers who enrolled at the University or in Community Colleges, a greater percentage had at least 3.5 grade-point averages than among those who enrolled at the State University. Moreover, twice as many of the high-achieving graduates in the follow-up sample enrolling in the University than in these other two public segments had SAT scores of 1,200 or above.

Comparing the enrollment behavior of these high-achieving graduates in 1983 with those in 1975 reveals two marked shifts -- (1) an increase in the proportion enrolling in out-of-state institutions, and (2) a drop from 23 percent to 17 percent in those enrolling in California Community Colleges. Despite this drop over the eight years, the quality of those students who did enroll in Community Colleges remained high, judging from their high school grade-point averages and above-average SAT scores. Nearly half of these high-achieving students in the follow-up sample attended 11 of the State's 106 Community Colleges, suggesting that many of the State's Community Colleges now enroll few University-eligible students and that some of these colleges may have difficulty offering quality transfer programs if they do not enroll more high-achieving students.

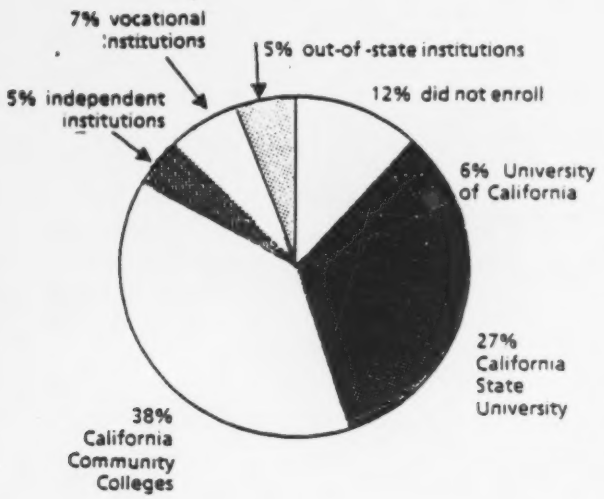
Enrollment choices of above-average achievers

Among graduates eligible for regular admission to the California State University but not the University of California were a sizable number who took most of the high school courses required by the University, but who failed to complete one or more of the required courses or received grades and test scores that were not quite high enough to achieve University eligibility.

As with high-achieving graduates, the vast majority of these above-average achievers -- 88 percent -- attended some postsecondary institution in the fall term immediately following high school graduation. As Display 4 on the opposite page shows, over 6 percent of them enrolled at the University of California, presumably on a special-admission basis. More than 27 percent enrolled at one of the State University's 19 campuses, and almost 38 percent attended Community Colleges. Less than 5 percent of them enrolled in California's independent institutions, 7 percent pursued vocational training, and 5 percent enrolled at out-of-state institutions that generally were not as selective as those attended by high achievers.

Women with above-average high school records were somewhat more likely than men to enroll either in the University of California, in independent institutions, or in an adult education program in a local school district. Men in this group were somewhat

DISPLAY 4 Enrollment choices of above-average academic achievers in the graduating class of 1983



Source: California Postsecondary Education Commission staff analysis of data from the first follow-up survey of graduates in the Commission's 1983 High School Eligibility Study.

more likely than women to enroll in proprietary schools and in out-of-state institutions.

Among above-average achievers in the four major ethnic groups, minority students were more likely than white students to enroll at the University of California as special admits.

- White graduates were more likely than those in other ethnic groups to enroll in Community Colleges or in out-of-state institutions and somewhat less likely to enroll in the State University, although they still comprised a clear majority of State University freshmen.
- Black graduates in this group were more likely to enroll in the University as special admits, in the State University, and in proprietary institutions.
- Hispanic graduates, on the other hand, were less likely to enroll in the State University or in Community Colleges and significantly more likely to enroll in independent institutions or in vocational-training programs.
- Asian graduates were most often enrolled in the University, State University, and independent institutions, and least likely to attend Community Colleges or out-of-state institutions.

As with high-achieving graduates, the high school grades and SAT test scores of above-average graduates were important factors in determining their subsequent enrollment choices. For example, nearly 75 percent of those in the sample who were attending the University as special admits had grade-point averages of 3.0 or higher, although they had not taken all the required courses to qualify for regular admission to the University. On the other hand, fewer of the above-average achievers attending Community Colleges and the State University itself had grade-point averages that ranked them near the top of their graduating class. Furthermore, those attending independent institutions in California were not attending the highly selective institutions in that group, and those attending out-of-state institutions were generally attending other less selective state universities and independent institutions. About three out of every ten State University-eligible graduates scored 1,000 or above on their SAT exams. Here again, the percentage of above-average achievers with high test scores as well as high grades was greater among those enrolling in Community Colleges than among those enrolling in the State University -- the same pattern that characterized high-achieving graduates enrolling in these two segments as well.

Compared with 1975, the proportion of above-average achieving graduates in 1983 who did not enroll in postsecondary education the fall following high school remained unchanged at approximately 12 percent as did the approximately 5 percent enrolling at out-of-state institutions. The percentage enrolled in vocational training programs increased from 2 to 7 percent between 1975 and 1983, while the percentage enrolled at independent institutions dropped from 7 to 5 percent. On the other hand, the number of State University eligibles enrolled in the University increased from 3 to 6 percent, and the proportion enrolled in the State University itself jumped from 22 to 27 percent. At the same time, the proportion of State University-eligible graduates attending Community Colleges dropped a full 10 percentage points from 48 to 38 percent.

The proportion of above-average-achieving students enrolling in the Community Colleges dropped a full 10 percentage points between 1975 and 1983, although their quality remained fairly high, judging

from their high school grade-point averages and their above-average SAT scores.

Enrollment choices of low and modest achievers

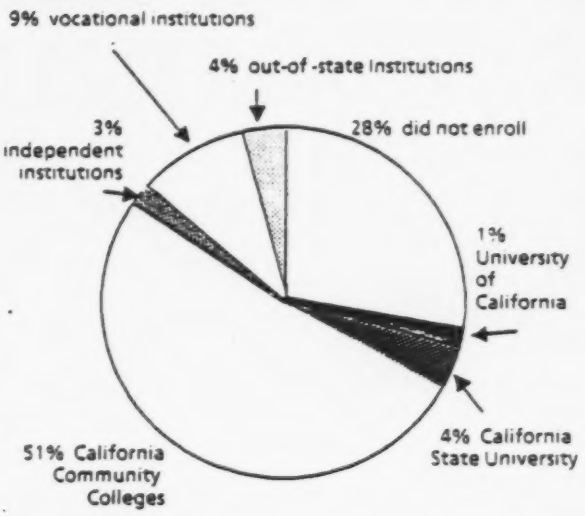
Those high school graduates ineligible for regular admission to either the University or State University accounted for 180,500 or seven out of every ten of the 254,944 members of the class of 1983. Four out of every ten of these graduates, or more than 107,300, were ineligible because they did not take the required admissions tests. An additional 28,000 had SAT test scores that were too low for regular admission, but the aspirations and plans of these modest achievers appear to set them apart from most other ineligible graduates, even if their high school academic records did not. Finally, over 45,100 had grade-point averages of less than 2.0.

Overall, among the low and modest achievers responding to the Commission's follow-up survey, nearly seven out of every ten enrolled in postsecondary education during the fall term following high school graduation, even though their grades and test scores limited the range of postsecondary options available to them. As Display 5 shows, less than 1 percent of them were granted special admission to the University, and 4 percent enrolled on the same basis in the State University. Less than 4 percent attended independent institutions, and 4 percent enrolled out of state. Over half enrolled in California Community Colleges, and the remaining one in ten enrolled in vocational programs at either adult schools or proprietary institutions.

Men among these low and modest achievers were more likely than women to not enroll in postsecondary education, and they were also over-represented among those granted special admission to the University and those enrolling at out-of-state institutions. Women, on the other hand, were more likely than these men to select vocational education options.

Low- and modest-achieving minority students were more likely than white students to enroll at the University and State University as special admits, especially Black students at the University and State University and Hispanic students at the State University. In all instances, the Community Colleges were the institutions where most low and modest achievers attending postsecondary education enrolled.

DISPLAY 5 Enrollment choices of low- and modest-academic achievers in the class of 1983



Source: California Postsecondary Education Commission staff analysis of data from the first follow-up survey of graduates in the Commission's 1983 High School Eligibility Study.

- White graduates were over-represented only among those who did not enroll in postsecondary education at all in Fall 1983 and among those attending out-of-state institutions.
- Black low and modest achievers, in contrast, were significantly more likely to enroll somewhere and were well represented among those attending the University, State University, independent institutions, and out-of-state colleges and universities.
- Hispanic low and modest achievers were well represented among those enrolling in the State University, independent institutions, and vocational-training programs.
- Finally, Asians were the most likely to enroll and were particularly well represented among those attending public four-year institutions.

The vast majority of the low and modest achievers in the follow-up sample granted special admission status to enroll at either the University and State University had high school grade-point averages

between 2.5 and 3.0, and SAT scores between 600 and 1,000. Most of these special admits to public four-year institutions were among those modest achievers who had taken most, if not all, of the required academic courses in the college-preparatory track in high school and took the required sequence of admissions exams, but their combined grades and test scores were insufficient to secure regular admission to these public four-year institutions and significantly below those of even the bottom 10 percent of regularly admitted students at the University. Almost none of the low achievers with grade-point averages below a 2.0 in high school were accepted as special admits.

Not only did the proportion of low and modest achievers enrolling in the Community Colleges drop slightly between 1975 and 1983, but the academic ability of those who did enroll was noticeably lower than among those specially admitted to four-year institutions. A substantially larger proportion of low and modest achievers enrolling in Community Colleges in 1983 than 1975 had grade-point averages below 2.5, and these colleges were the only ones enrolling significant numbers of graduates with grade-point averages below 2.0.

The large number of students whose academic preparation and performance in high school was weak as well as students over 18 years of age who failed to graduate from high school helps account for the increasing demands on these colleges to provide remedial instruction. These demands are increasing at the same time the colleges seek to offer quality transfer and vocational programs to the decreasing number of University and State University eligibles who enroll in them and to the low- and modest-achieving students who want to achieve eligibility to transfer to the University or State University.

Activities of graduates who did not attend college

Less than 3 percent of high-achieving graduates, 12 percent of above-average achievers, and at least 28 percent of low and modest achievers in the Class of 1983 who responded to the Commission's follow-up survey did not enroll in postsecondary education during the fall term following high school graduation. The actual figures are undoubtedly higher, particularly among low- and modest-achieving graduates because those not attending postsecondary education were less likely to respond to the follow-up survey.

The vast majority of these graduates were employed either full or part time. Nearly six out of every ten of the men and two-thirds of the women in this group were working. About 3 percent were engaged in some form of job training, while an additional 16 percent were seeking work but were currently unemployed. Among the men, one out of seven had enlisted in the military, but perhaps not surprisingly very few of the women reported doing so. Finally, about 5 percent of the men and nearly 11 percent of the women indicated that they were involved in some other activity, such as volunteer work, travel, or homemaking.

The small number of high-achieving University-eligible men in this group had the lowest percentage working, below average numbers were unemployed, and an above average percentage enlisting in the military or engaged in other activities. Eight out of every ten high-achieving women were employed, and the rest were unemployed but looking for work.

Over half of the above-average-achieving men in this group were working, barely one in ten was unemployed or receiving job training, and approximately one-fourth were enlisted in the armed services. Nearly two-thirds of the above-average-achieving women were working, and most of the others were evenly divided between the unemployed and those engaged in other activities.

Low- and modest-achieving graduates were much less likely than others to attend postsecondary education after graduation. Nearly 60 percent of the men and almost 66 percent of the women who were low and modest achievers and out of school were working full or part time during the year following graduation, and both the men and women in the ineligible group had above-average unemployment rates. Nevertheless, the 16 to 18 percent unemployment rates among all these high school graduates were well below the statewide unemployment rate of 21 percent in September 1983 for all California youth between 16 and 19 years of age. Of course, this latter group included many junior high and high school dropouts, not just high school graduates from the Class of 1983, and the unemployment rate among dropouts is generally higher than among high school graduates.

Some of these graduates who decided to work or engage in other activities following high school rather than to enroll in postsecondary education will eventually attend some California college or university. Most will enroll at a Community College, judging from the age of first-time freshmen in the three public segments of higher education in 1983. That fall, over 99 percent of the University's first-time freshmen from California high schools were aged 19 or under, as were over 96 percent of those enrolling in the State University. Most of the others, moreover, were in their early twenties. On the other hand, just 67 percent of the Community Colleges' first-time freshmen from California high schools and only 51 percent of all their first-time freshmen who had never previously enrolled in any college were 19 years of age or younger. Overall, nearly three out of every ten Community College first-time freshmen were in their twenties when they first enrolled, an additional one in ten were in their thirties, and another one in ten were 40 years of age or more.

In summary, these enrollment data demonstrate the unique contribution of the California Community Colleges to access and educational opportunity in California through their open-admission policy and their service to Californians of all ages who seek to continue their education or enhance their job skills. Furthermore, these same data make clear that these colleges provide an important educational point of entry not only to large numbers of ethnic minority and low-income California residents, but for many others migrating to California from elsewhere in the country or the world. For example, fully 94 percent of the more than 1,700 Asian first-time freshmen in their thirties enrolling in Community Colleges in Fall 1983 did not graduate from California high schools. Most of them were presumably either refugees from southeast Asia or immigrants from overseas.

FOUR

Characteristics of First-Time Freshmen from the Class of 1983

WHICH high school students actually enroll in college? And who enrolls at what type of college? Display 6 on page 16 shows how many of each 1,000 of California's ninth graders in 1979-80 had enrolled as first-time freshmen in California's three public segments of higher education by Fall 1983, based on information from the segments and the Postsecondary Education Commission.

As can be seen, among the State's white students, 412 had most likely enrolled in the three segments, while 588 had not. Among Black students, 332 were enrolled, but 668 were not. And among Hispanic youth, at most only 253 were enrolled, compared to 747 who did not attend any of the three segments. More Asian students continued their education than any other group, but comparable figures for them are unavailable because of the impact of high Asian immigration in recent years on high school retention-rate statistics.

Community College first-time freshmen

Of all three public segments, the ethnic composition of first-time freshman enrollment in the Community Colleges most closely approximates the composition of California's 1983 high school graduating class. Nonetheless, in 1983, Asian and Hispanic students were slightly underrepresented among their first-time freshmen, while American Indian, Black, Filipino, and white students were slightly overrepresented, compared to their numbers among 1983 high school graduates.

Community College students ran the entire gamut of academic ability from University-eligible students with outstanding high school grade-point averages and good SAT scores to high school graduates with less than a 2.0 grade-point average and a sizable number of high school dropouts. In fact, the Assembly Office of Research has found that over 10,000, or more than 10 percent, of the high school dropouts from the class of 1983 enrolled in a Community College in Fall 1983.

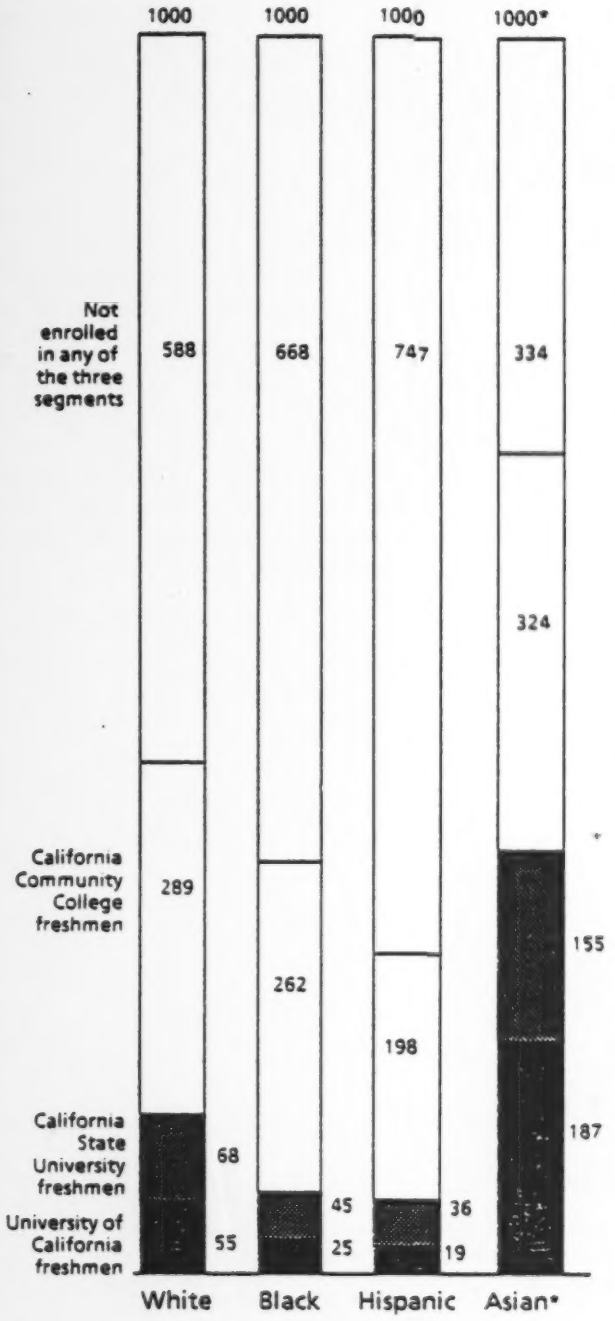
Community College students range from 18- and 19-year old first-time freshmen just out of high school to students in their thirties or forties, including large numbers of people who have moved to California from other states and countries and are now enrolling in postsecondary education for the first time. Indeed, two-thirds of all first-time Community College freshmen graduating from California high schools and just half of all Community College first-time freshmen were aged 19 or under, while the rest were older students. Large numbers of them were unprepared to begin college-level work immediately, and others who were returning to formal education again after long absences faced difficult adjustments in their return to the classroom.

California State University first-time freshmen

A high percentage of Black and Asian graduates enrolled as first-time freshmen in the State University, in terms of their proportions of the State University's eligibility pool, while Hispanic students enrolled in about the same proportion, and white students enrolled in substantially lower proportions. For instance, Black first-time freshmen accounted for 7.2 percent of all State University first-time freshmen but only 3.7 percent of the State University's eligibility pool. Asian students accounted for 11.5 percent of the first-time freshmen but only 8.7 percent of the State University's eligibility pool, whereas white students comprised 66.1 percent of the first-time freshmen but 72.1 percent of this eligibility pool. Some of these State University freshmen were eligible for University admission but chose to attend the State University instead of the University.

Among Black and Hispanic State University first-time freshmen, however, a clear majority were special-admission students. Some of them had fairly solid academic records in high school, but the majority had grade-point averages between 2.0 and 2.9 and either had not taken the required tests or had taken them and scored too low to qualify for regular

DISPLAY 6 First-time freshman enrollment rates in Fall 1983 of California 1979-80 ninth graders, by major ethnic group



*The high school dropout rate of Asian students is unknown because of extensive immigration of Asian high-school-age youth. Numbers of Asian students are based on every 1,000 high school graduates rather than ninth graders.

Source: California Postsecondary Education staff analysis of California State Department of Education and segmental data.

admission. For example, a clear majority of the State University special-admission students who responded to the Commission's follow-up survey and who had taken the SAT exams had combined scores between 600 and 800, whereas the statewide average score for all California test takers was 897. Very few of these specially admitted students had scores of 1,000 or more.

University of California first-time freshmen

The University's first-time freshman enrollment shows the combined impact of the low rate at which Black and Hispanic high school graduates attain eligibility for regular admission, the wide range of educational options available to high-achieving students, and the effects of the University's special-admission policy for low-income disadvantaged students who are otherwise ineligible to attend.

Only 838 of the nearly 23,300 Black public high school graduates in 1983 were eligible for regular admission to the University, and some of these highly qualified Black graduates enrolled in other California colleges and universities and in out-of-state institutions. Approximately 44 percent of all high-achieving Black graduates enrolled in the University -- a percentage second only to that of Asian high achievers. Nevertheless, more than half of the 882 Black first-time freshmen at the University in Fall 1983 were special-admission students.

Less than one-third of the small number of high-achieving Hispanic graduates actually enrolled in the University -- the lowest rate for any ethnic group -- and over 45 percent of the University's Hispanic first-time freshmen were special admits. In contrast, more than 60 percent of the Asian graduates eligible to attend the University actually enrolled, and few of the Asian first-time freshmen were special admits. About 35 percent of white University eligibles actually enrolled, and virtually none did so on a special-admission basis.

As noted earlier, some of the special admission students at the University were State University-eligible graduates who had above-average high school grades. Nearly 75 percent of those State University-eligible students in the follow-up survey who enrolled at the University had high school grade-point averages of 3.0 or better. Although fewer special-admission students were at the top of the grade-point range and most had lower SAT scores

than regular admission students, they were for the most part drawn from the ranks of above-average graduates, and the vast majority of them appear to have taken most, although not all, of the University's required preparatory courses.

Freshman preparation and remediation

The degree of preparation of new freshmen for college-level work is a major factor in their subsequent college performance and their likelihood of graduation. While eligibility for regular admission is an indicator of prior academic performance, an increasingly large portion of both regularly and specially admitted undergraduates in all three public segments require remedial course work in reading, writing, or mathematics before they are ready to undertake college-level course work successfully.

Remedial instruction in the Community Colleges

According to the Commission's 1981 report on remediation, *Promises to Keep*, nowhere is the diversity of students and the range of academic preparation more evident than in the Community Colleges. The 101 colleges responding to the Commission's 1981 survey indicated that they had 211,845 enrollments in remedial reading and writing courses in 1980-81 and that these accounted for 45 percent of their total enrollments in English courses that year. This corresponds fairly closely to national data indicating that about 40 percent of all English enrollments in Community Colleges are in remedial reading or writing courses. The California Community Colleges also reported that they had 200,925 enrollments in remedial mathematics courses in 1980-81, and that these comprised 57 percent of their total mathematics enrollments. Again, no more recent figures are available for the class of 1983, but the available evidence suggests that in Fall 1983 remedial courses still accounted for a major portion, if not a majority, of all Community College enrollments in reading, writing, and mathematics courses.

Remedial instruction in the State University

Nearly half of the State University students taking their English Placement Test need remedial assistance before entering freshman composition courses. In 1979-80, the State University enrolled 10,539 students in remedial reading and writing courses, and the number jumped to 13,266 the following year -- accounting for 8 and 10 percent of all English course enrollments, respectively. The State University also provided remedial mathematics instruction to 15,790 students in 1979-80, and 18,327 the next year, accounting for one out or every seven students enrolled in math courses in each of these years.

Remedial instruction in the University

Over half of all new freshmen at the University of California in 1979-80 had to enroll in Subject A or equivalent courses to improve their basic writing proficiency. In that year, more than 11,000 University students were enrolled in remedial reading and writing courses, accounting for 16 percent of total enrollments in English courses. There were also 7,490 enrollments in remedial mathematics courses, representing 9 percent of all enrollments in University mathematics courses in 1979-80. While no definitive figures are available on the extent of the University's remedial instruction in 1983, there is no reason to believe that the problem is any less severe now than it was four years ago.

FIVE

From College Freshmen to Four-Year College Graduates

ENROLLMENT in college is the first step toward realizing the promise of access to higher education in California, but a large portion of those who enroll in higher education never graduate. According to the National Center for Education Statistics, about half of those enrolling in four-year colleges nationally drop out before earning a bachelor's degree. Far fewer graduate with an associate degree from two-year colleges, in part because many students enroll to take courses without planning to get a degree but also because of the diverse abilities and circumstances of community college students and because some students transfer to four-year institutions before earning their associate degree.

California can be justifiably proud of its high rank among the states in terms of participation in post-secondary education, but it does not rank nearly so high in terms of the number of students earning bachelor's degrees.

Display 7 on the opposite page shows how many of California's ninth graders in 1979-80 could be expected to graduate from the University of California or the California State University within five years of enrolling there as freshmen -- for example, 33 white students at the University, and 23 at the State University, for a total of 56 out of 1,000 ninth-graders. In comparison to these 56 white students, only 16 Black students and only 14 Hispanic students could be expected to earn a bachelor's degree from either university within five years of enrolling. (As mentioned earlier, the high school dropout rate of California's Asian students is unknown, and so the numbers for Asian students are based on high school graduates.)

Retention and graduation at the University

Among regularly admitted students at the University of California, nearly 60 out of every 100 graduate within five years, another 10 graduate later from the University, and an additional 10 graduate from some other college or university. If those members of the Class of 1983 entering the University are similar to their counterparts in earlier years, approximately 60 out of every 100 first-time freshmen will earn a bachelor's degree somewhere in the system within five years. The rates vary from 53 out of every 100 at Santa Cruz to 67 out of every 100 at Berkeley and Davis, although some of the graduates at the larger campuses actually began their University educations at smaller campuses in the system. In addition, approximately ten out of every 40 who do not receive a degree within five years will earn their University degree at a later time, and another ten will eventually earn a degree at some other college or university.

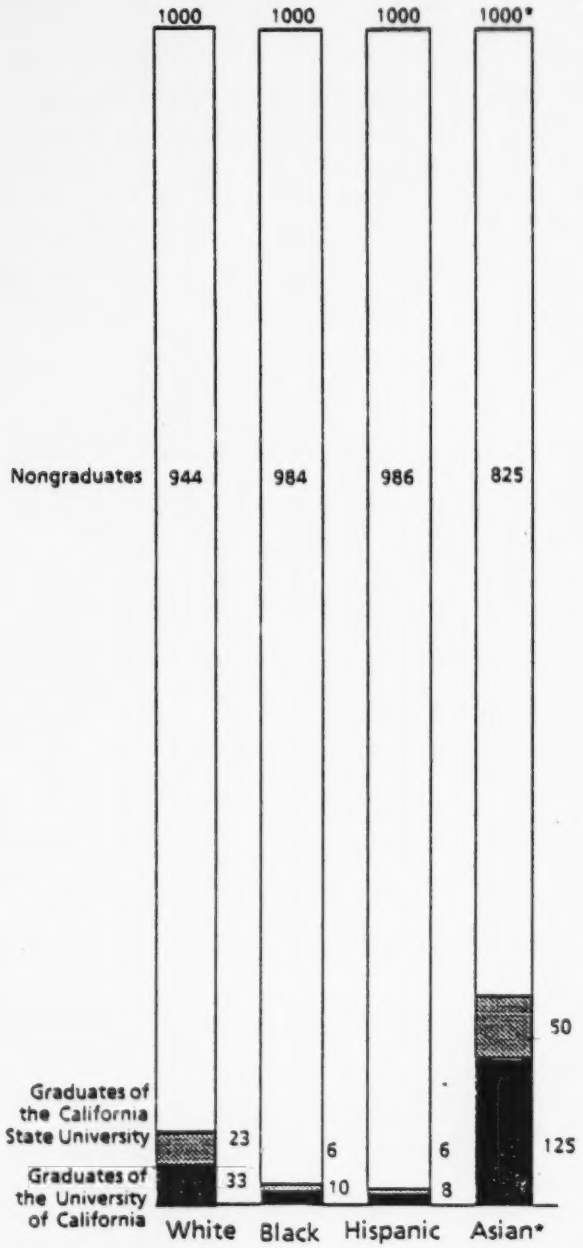
The overall 70 percent graduation rate at the University for regularly admitted students is much higher than the national average for public four-year institutions but lower than the persistence and graduation rates found at highly selective private universities. If the 5 to 6 percent of all University first-time freshmen who are special-admission students were included in these figures, the University's persistence and graduation rates would be slightly lower because these students are somewhat less likely than regularly admitted students to continue beyond the first year and significantly less likely to graduate.

Retention and graduation at the State University

In the State University, both the retention and graduation rates are lower than at the University and below the national average for four year colleges. Among regularly admitted first-time freshmen, just 29 percent graduated within five years, an additional 11 to 14 percent are still enrolled, and some of these may eventually graduate.

The State University has tracked two groups of first-time freshmen -- those who enrolled in its 19 campuses in Fall 1973 and those who did so in Fall 1978.

***DISPLAY 7** Projected graduation within five years from California's public universities of California 1979-80 ninth graders, by major ethnic group*



* The high school dropout rate of Asian students is unknown because of extensive immigration of Asian high-school-age youth. Numbers of Asian students are based on every 1,000 high school graduates rather than ninth graders.

Source: California Postsecondary Education staff analysis of California State Department of Education and segmental data.

Of all first-time freshmen who enrolled in the State University in Fall 1978, 72 percent were still enrolled in Fall 1979; nearly 26 percent earned a degree by Fall 1983; and an additional 18 percent were still enrolled as undergraduates that year. Compared with the entering freshmen in the Fall of 1973, the Fall 1978 group were slightly more likely to persist within the State University but less likely to earn a degree within five years, since 30 percent of the Fall 1973 group had graduated within five years. The pattern of part-time enrollment and full- or part-time employment among State University students, particularly at the upper-division level, has created a situation where the typical time to degree for those who persist has increased over the years to six, seven, or more years to earn a baccalaureate degree instead of the more traditional four or five years. As a result, the State University's overall graduation rate increases from 25.6 percent in five years to 40.3 percent in seven years, and 44.1 percent within ten years of initial enrollment. Moreover, some of the students who drop out of the State University along the way probably enroll in other public or independent institutions and some of these may have eventually graduated from college, but others clearly do not.

Nearly 74 percent of all regularly admitted State University freshmen in 1978 were still enrolled one year later; 62 percent were still enrolled after two years; and 29 percent of these first-time freshmen graduated within five years. These persistence rates were somewhat lower than the comparable rates for regularly admitted State University students in Fall 1973, and fewer of the Fall 1978 group were progressing as rapidly toward completing their degrees, since 33 percent of the Fall 1973 group graduated within five years. The most recent State University continuation and graduation rates for regular admission students are also substantially lower than those of the University and below the national average for students at public four-year institutions, despite the fact that the State University is more selective than most public four-year institutions in other states.

Attrition and graduation rates at the State University vary slightly between men and women, but the greatest differences are between students who were regularly and specially admitted. Among specially admitted first-time freshmen in Fall 1978, less than 65 percent were still enrolled after one year, less than 46 percent were enrolled after two years, and

further losses continued to occur among those who remained, averaging nearly 20 percent per year for the next three years. After five years, less than 25 percent of the specially admitted State University students were still being tracked. Exactly 17 percent were still enrolled as undergraduates, and less than 8 percent -- or fewer than one out of every 12 who began as first-time freshmen five years earlier -- had graduated. While comparisons with the earlier Fall 1973 special-admission students indicate that persistence in the first and subsequent years has improved somewhat the already low five-year graduation rate of 10 percent for the Fall 1973 group has dropped further.

These special-admission students include 50 to 60 percent of all the Black and Hispanic first-time freshmen enrolled in the State University in Fall 1978. If similar patterns of persistence and graduation hold for those entering the State University from the Class of 1983, its graduation rates of under-represented low-income and ethnic minority students are likely to remain below those for Asians and whites in the near future.

Transfer of Community College students to four-year institutions

Some of the more than 98,000 members of the Class of 1983 who enrolled in Community Colleges in the fall following graduation will eventually complete part or all of their lower-division academic work at those colleges before transferring to four-year institutions to complete their baccalaureate degrees. The transfer function is a cornerstone of California's Master Plan for Higher Education, and strengthening it is critical to the State's ability to increase the number of low-income and disadvantaged young people who ultimately earn a bachelor's degree from a four-year college or university, since most of them begin their college careers in the Community Colleges.

In all, 37.9 percent of California's public and private high school graduates 19 years of age or younger enrolled in Fall 1983 in one of the State's 106 Community Colleges -- a sharp drop from the 42.8 percent who enrolled in earlier years. There were at least four sub-groups of these first-time freshmen:

1. Those eligible to enroll at the University of California on the basis of their high school record;
2. Those eligible to enroll at the State University but not the University directly out of high school;
3. Those who were ineligible for regular admission to the University or State University because of minor subject deficiencies in high school; and
4. Those with major deficiencies in preparation or level of performance.

The relative size of these four sub-groups within the Community Colleges' first-time freshmen provides an important clue about the size of the potential pool of transfer students in future years, but three trends since 1976 have all served to reduce the size of this potential pool:

- The number of high school graduates has dropped from 289,454 in 1976 to 262,160 in 1983 -- a decline of 9 percent.
- For a variety of reasons, the number of graduates who achieve eligibility for both the University and State University have dropped in these same years from 14.5 percent to 13.2 percent eligible for regular admission to the University and from 20.5 percent to 16.0 percent eligible for regular admission to the State University but not the University.
- As noted earlier, the percentage of high-achieving students attending Community Colleges appears to have dropped from 23 percent in 1976 to 17 percent in 1983, and the number of State University-eligible students enrolling first in Community Colleges has dropped from 49 percent to 39 percent in these same years.

The net effect of these three changes has been a nearly 40 percent reduction in the number of University-eligible graduates attending Community Colleges directly out of high school and a 45 percent reduction in the number of State University-eligible graduates attending these colleges between 1975 and 1983. Together, these students represented one out of every three first-time freshmen aged 19 and under in the Community Colleges in 1976, but they now account for barely one in five.

While these two groups of young freshmen are among those most likely to eventually transfer to four-year institutions, a significant element of the Community College transfer function is to remedy the subject-matter and performance deficiencies of students who seek to transfer but who were ineli-

gible for regular freshman admission to the University and State University at graduation. About 70 percent of the students who transfer to the University with freshman or sophomore standing were ineligible to attend directly out of high school, while the other 30 percent are students who were eligible for regular admission but attended a Community College first. The number of eventual transfer students to the State University who were originally ineligible for admission is not known at this time, but again a large number of Community College transfers appear to come from among those originally ineligible to attend the State University after high school graduation.

The total number of transfer students each year from Community Colleges to public four-year institutions and their subsequent persistence and performance at four-year institutions is the one common measure of the health of the transfer function. Over the last eight years, the number of transfer students had declined markedly from 7,123 transfers to the University in 1976 to 5,305 in 1983, and from 32,653 Community College transfers to the State University in the former year to 30,274 in the latter.

The changes that have occurred in these same years in the composition of the Community Colleges' first-time freshman class, together with the substantial decline in the number of first-time freshmen in both Fall 1983 and Fall 1984 indicate that the recent upturn in transfers may prove temporary and that further declines in the number of transfer students may be likely in the near future.

Information on the persistence, performance, and graduation rates of Community College transfer students is somewhat sketchy, but several general patterns are clear. In both the University and State University, the greatest attrition of transfer students occurs in their first year after transfer, suggesting that so-called transfer shock is similar in its origins to the sometimes difficult adjustments freshmen must make in their first year of collegiate life.

Retention and graduation of transfer students at the University

The only available data on the persistence of Community College transfer students in the University are somewhat dated. Nonetheless, they show that between 20 and 30 percent of these students leave either during or immediately following their first year at the University and that about one-half of those who depart are having academic difficulties at the time they leave.

The Community College transfer students who persist to graduation earn slightly lower grades on average in their first year of upper-division work at the University than junior-level students who began their college careers as freshmen there, but the vast majority earn high enough grades to maintain good academic standing. On the other hand, the grade-point average gap between transfer and native students is greater for transfers who were ineligible out of high school than for those who had been eligible for regular admission as freshmen.

By the end of their second year at the University, the upper-division grades earned by Community College transfers who were eligible from high school and persist to graduation improve from 2.9 to 3.0, and the grade-point average gap between them and native freshmen narrows further. Both are nearly as likely to graduate at the same time. While the grades earned by transfer students who were originally ineligible for regular admission in high school improve from 2.6 to 2.8 between their first and second year after transfer, they are 25 percent less likely to graduate on time than either of the other two groups of University students.

Retention and graduation of transfer students at the State University

The vast majority of all Community College students who transfer to a four-year college or university in California enroll in the State University. Of the more than 45,000 transfer students who enter the State University each year, approximately 70 percent are still enrolled somewhere within that system the following year. This is nearly the same percentage persisting to the second year as for first-time freshmen within the State University. Nearly half of all these Community College transfer students are still enrolled after two years, and about one out of every three graduates within three years after transfer. Not only is this 34 percent three-year graduation rate for transfers to the State University well below the comparable rate for transfers to the University, it is also below the 50 percent rate for State University students who begin as freshmen within that system and persist to their junior year.

Based on recent systemwide reporting by the State University, the differential between Community

College and State University grade-point averages is smaller than that found for transfers to the University and may be close to zero. One explanation may lie in the nature of the competition for upper-division grades at the two segments, in that transfer students to the University are competing with a highly selected native-student population that has persisted to the junior level, while State University transfers are competing largely among themselves since native students comprise at most about half of all State University students at the upper-division level.

SIX

Characteristics of University and State University Graduates

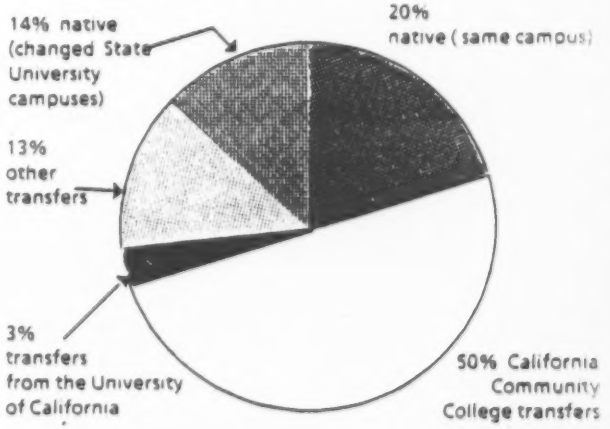
IN 1982-83, students who had attended Community Colleges earned 21 percent of the University's 21,328 baccalaureate degrees and 50 percent of the State University's 42,959 baccalaureate degrees. These percentages are only approximations of the number of degrees awarded to Community College transfer students, since many of these degree recipients enrolled at several institutions en route to the degree and may have spent only a short time in a Community College. Still, they compare favorably with the percentages of native students who enrolled directly from high school and were awarded 53 percent of the University's and 34 percent of the State University's baccalaureate degrees. Transfers between these two segments accounted for 5 percent of the University's and 3 percent of the State University's degrees; and transfers from other types of institutions accounted for the remaining 21 and 13 percent, respectively. Display 8 portrays these percentages graphically.

Because of the widely differing attrition rates within each segment – especially the attrition and graduation rates for students from different ethnic groups and for those who were regularly instead of specially admitted -- the ethnic composition of the graduating class differs substantially from that of the entering freshmen or of transfer students. About six out of every ten regularly admitted freshmen in the University graduate within five years, compared to one out of every five or six special-action disadvantaged students. In the State University, only about one out of every four regularly admitted freshmen graduate within five years, although four in ten may eventually graduate. But among specially admitted first-time freshmen, less than one in twelve graduates within five years, and probably no more than one in six ever earns a State University baccalaureate degree.

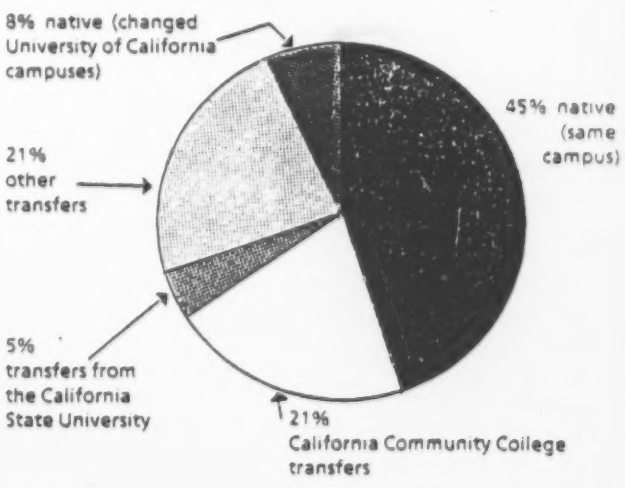
In the University, at least 60 percent of Community College transfer students earn their baccalaureate degrees, compared to 75 percent of native freshmen who persist to their junior year. In the State Univer-

DISPLAY 8 Percentage distribution of California State University and University of California graduates by segment of previous enrollment

The California State University


14% native (changed State University campuses)
20% native (same campus)
13% other transfers
3% transfers from the University of California
50% California Community College transfers

University of California


8% native (changed University of California campuses)
45% native (same campus)
21% other transfers
5% transfers from the California State University
21% California Community College transfers

Source: California Postsecondary Education Commission staff analysis of California State University and University of California data.

sity, the comparable percentages are 34 percent and 50 percent, respectively.

White students entering as freshmen are much more likely to graduate than Black or Hispanic students, and Asian freshmen in both segments are more likely to persist and graduate within five years than any other group. One University study showed that approximately 51 percent of its white first-time freshmen graduated within five years, compared to 40 percent of its Hispanic first-time freshmen, 38 percent of its Black freshmen, and 66 percent of its Asian students. Some of the others graduate in more than five years, but the relative success rates of the various ethnic groups appear to hold beyond this point.

In the State University, the five-year graduation rates for first-time freshmen entering in Fall 1973 were 34 percent for white students, 16 percent for Hispanic students, 14 percent for Black students, and 34 percent for Asian freshmen. The substantially lower five-year graduation rate for Black and Hispanic students in the State University than for white and Asian students reflects in part the very low graduation rate for specially admitted students who comprise more than half of all first-time freshmen from these two ethnic groups. Among Community College transfer students to the State University, the three-year graduation rates appear higher at first glance, but are in fact one-third lower than for freshman students who persist to their junior year. Approximately 38 percent of the white transfer students, 28 percent of the Hispanic students, 21 percent of the Black students, and 38 percent of the Asian transfer students graduate within three years from a State University campus.

SEVEN

Student Flow Through High School and College in California

THE previous pages have indicated that after more than a century of commitment to access and educational opportunity at high quality public and independent institutions in California, substantial disparities continue in the academic achievement and educational attainment of different groups of students within California. Parents' education, occupations, family income, cultural attitudes, and the educational institutions themselves all play major roles in the subsequent academic achievement of young Californians, the degree to which they appear to avail themselves of the considerable educational opportunities available, and attendance and relative success in postsecondary education.

Efforts to more adequately fund education at all levels, except the Community Colleges, after years of tight budgets and reduced funding in constant dollars, as well as attempts to reform and strengthen the quality of education and student performance in the public schools, are still too recent to have had much impact yet on patterns that have been developing over decades. Over 80 percent of the Hispanic third-grade students in California public schools are still reading below grade level. Such gaps in the rate of learning and academic achievement show up early in the elementary school years and tend to widen more in ensuing years. Special outreach activities and special admission, affirmative action, educational opportunity, and financial aid programs have contributed to the gains that have occurred in minority enrollments in postsecondary education in recent years. Nevertheless, as the previous pages have shown, Black, Hispanic, and American Indian students are still more likely to drop out of school and college before graduating than are white or Asian students.

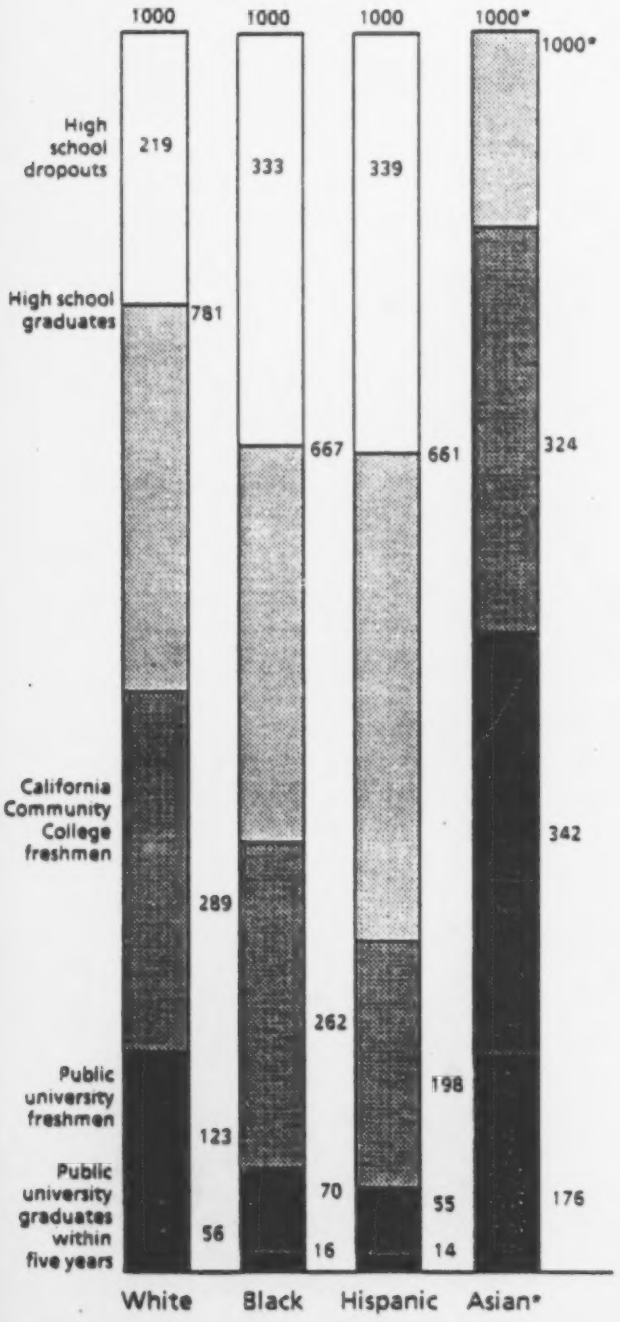
- To summarize, students from these same three ethnic groups are much more likely to attend inner-city schools with serious problems, come from low-income families, and have parents with less schooling than are most of their white and some of their Asian counterparts.
- Black and Hispanic students are more likely to be enrolled in the remedial, vocational, or general education tracks in high school than white or Asian students, and considerably less likely to be enrolled in college-preparatory courses, particularly those required for entry into the University of California.
- Not only do fewer Black and Hispanic students qualify for regular admission to either the University or State University than white or Asian high school graduates, a smaller percentage of them actually enroll on a regular-admission basis, and over half of all Black and Hispanic students who attend the University and State University do so on a special-admission basis.
- At the same time, the percentage of Black and Hispanic Community College transfer students to the University and State University is lower than their percentages among the Community College population, and also lower than the percentage of Black and Hispanic first-time freshmen in the University and State University.
- For a variety of personal, academic, and financial reasons, the attrition rates for Black and Hispanic first-time freshmen and Community College transfer students in both segments are greater than among white and Asian students.
- Finally, a smaller percentage of students from these underrepresented ethnic minority groups actually persist and earn their baccalaureate degrees in five or more years.

These differences among the State's four major ethnic groups are quite pronounced, as Display 9 on page 26 and the following paragraphs demonstrate.

White students

As noted earlier, 781 out of every 1,000 white ninth graders in 1979-80 graduated from high school four years later in 1982-83, but the remaining 219 dropped out before graduation. Of the 1,000, 129 were

DISPLAY 9 High school dropouts and graduates, public college and university freshmen, and projected public university graduates among 1979-80 ninth graders, by major ethnic group



* The high school dropout rate of Asian students is unknown because of extensive immigration of Asian high-school-age youth. Numbers of Asian students are based on every 1,000 high school graduates rather than ninth graders.

Source: California Postsecondary Education staff analysis of California State Department of Education and segmental data.

eligible for regular admission to the University, and 55 actually enrolled there. An additional 140 were eligible for regular admission to the State University but not the University, and 68 of these actually attended the State University. Another 289 enrolled initially in Community Colleges, and some later transferred to the University and to the State University.

Of the original 1,000, 33 are likely to graduate from the University within five years, but only 23 will graduate from the State University in the same period of time. The greater attrition in the State University, the six or seven years it often takes its more heavily part-time undergraduates to earn their baccalaureate, and the large number of Community College transfer students there means that perhaps an additional ten who began as freshmen and probably 20 to 25 who transferred from Community Colleges will also graduate from the State University at a later time.

Black students

Out of every 1,000 Black ninth grade students in 1979-80, just 667 graduated from high school in the class of 1983, and the remaining 333 dropped out of school. Of the 1,000, just 24 were eligible for regular admission to the University. Approximately 11 enrolled there as regularly admitted students, and an additional 14 were granted special-admission status. Out of these 25 Black first-time freshmen, only 10 will graduate within five years; one more probably will graduate later; and the dozen others will drop out.

An additional 43 Black youths out of the original 1,000 were eligible under regular admission to attend the State University but not the University directly out of high school, and about 20 did so, along with 25 others who were granted special admission there. Among these 45, four of the regularly admitted Black students and two of those specially admitted students will graduate within five years, and several others will likely do so at some later time.

Finally, 262 of the 1,000 Black students attended Community College the fall following graduation from high school, with some eventually transferring to the University and the State University, and perhaps half of these graduating.

Hispanic students

The retention and graduation pattern among Hispanic ninth-graders in California is generally similar to that of Black students, with important variations. Out of every 1,000 who began the ninth grade in 1979-80, 661 graduated from high school with the Class of 1983. This figure almost certainly overstates the high school graduation rate among Hispanics, because known immigration in the intervening years offset some attrition. In any event, of these 661 high school graduates, only 32 were eligible for regular admission to the University, and just 69 were eligible for regular admission to the State University.

In Fall 1983, a total of just 19 Hispanics out of every 1,000 who had been enrolled in the ninth grade four years earlier actually enrolled in the University, and only 36 attended the State University. In both instances, about half of these first-time freshmen enrolled on a special-admission basis. While more Hispanic than Black high school graduates thus attained eligibility for regular admission to the University, a smaller percentage of Hispanics actually enrolled.

Out of every 1,000 Hispanic ninth graders in 1979-80, 198 enrolled in a Community College in Fall 1983. Of these, some will probably eventually transfer to the University or the State University. Finally, out of the original 1,000 only eight will graduate from the University and six from the State University within five years. Counting the few still enrolled in each segment after five years, perhaps three or four more may graduate eventually, meaning that scarcely 20 out of every 1,000 Hispanic ninth graders are likely to graduate from California's public four-year colleges and universities.

Asian students

The influx of large numbers of Asian immigrants between 1979-80 and 1982-83 makes it difficult to assess the levels of attrition and retention between ninth grade and high school graduation for this group. Out of every 1,000 Asian ninth-graders in 1979-80, there were 1,174 Asian high school graduates four years later. Out of every 1,000 of these graduates, 269 were eligible for regular admission to the University and an additional 221 were eligible to attend the State University. Out of these, 187 actually enrolled as freshmen in the University, 155 in the State University, and 324 attended a Community College. Furthermore, out of the original 1,000 Asian students, 125 will graduate from the University and 51 will earn their degree from the State University within five years.

Increasing options and opportunity

These figures suggest that today California confronts major questions of educational access and equity, and that the actions the State and its citizens take to respond to these questions will in large part shape California's future. These include:

- In addition to the educational reform efforts already underway, what can be done to improve the education received by all Californians from kindergarten through the eighth grade to reduce the likelihood of dropouts and assure that more young people are ready to undertake a demanding college-preparatory curriculum in high school?
- What is being done and what other steps are needed in the high schools to better prepare all students for future roles as productive members of society, whether they go directly from high school graduation into the world of work or into a college or university?
- How can the serious problem of high school dropouts be reduced, and what can be done to better motivate and prepare the diverse group of potential dropouts, ranging from low-income to affluent youth and from bright and bored students to those who are several grade levels behind their peers?
- What can be done to increase the rate at which low-income and ethnic minority students attain eligibility for regular admission to the University and State University and enroll in postsecondary education, while at the same time assuring that they will be better prepared to complete the rigorous course work required for graduation from college?
- How can the Community Colleges with their pool of high- and moderate-achieving students declining more than twice as fast as their already shrinking pool of first-time freshmen continue to prepare both these students and their increasingly large number of low-achieving students for eventual transfer to four-year institutions and for academic success after transfer?

- What will happen to the State's public four-year institutions if the decline in transfer students in recent years erodes further in the years to come? What will this do to their balance between lower- and upper-division instruction and to their roles as envisioned under the Master Plan?
- What are the root causes of the alarmingly high attrition among both regularly and specially admitted students in the State University, and what can be done to improve the retention and timely graduation rates of its undergraduates?
- What are the consequences for both students and the State that so many of those who currently enroll in college drop out before completing their baccalaureate degrees?
- Recognizing that achieving equal educational opportunity will never mean equalizing educational outcomes, which of the many programs that the State has undertaken over the past 20 years from early outreach to financial aid seem to be most effective in enhancing the preparation, participation, and subsequent performance of low-income and disadvantaged minority students in higher education? And finally, what more can be done to improve California's still unsatisfactory record of minority participation and achievement in high school as well as college?

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CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

THE California Postsecondary Education Commission is a citizen board established in 1974 by the Legislature and Governor to coordinate the efforts of California's colleges and universities and to provide independent, non-partisan policy analysis and recommendations to the Governor and Legislature.

Members of the Commission

The Commission consists of 15 members. Nine represent the general public, with three each appointed for six-year terms by the Governor, the Senate Rules Committee, and the Speaker of the Assembly. The other six represent the major segments of postsecondary education in California.

As of 1985, the Commissioners representing the general public are:

Seth P. Brunner, Sacramento, *Chairperson*
C. Thomas Dean, Long Beach
Seymour M. Farber, M.D., San Francisco
Patricia Gandara, Sacramento
Ralph J. Kaplan, Los Angeles
Roger C. Pettitt, Los Angeles
Sharon N. Skog, Mountain View
Thomas E. Stang, Los Angeles, *Vice Chairperson*
Stephen P. Teale, M.D., Modesto

Representatives of the segments are:

Sheldon W. Andelson, Los Angeles; representing the Regents of the University of California

Claudia H. Hampton, Los Angeles; representing the Trustees of the California State University

Peter M. Finnegan, San Francisco; representing the Board of Governors of the California Community Colleges

Jean M. Leonard, San Mateo; representing California's independent colleges and universities

Darlene M. Laval, Fresno; representing the Council for Private Postsecondary Educational Institutions

Angie Papadakis, Palos Verdes; representing the California State Board of Education

Functions of the Commission

The Commission is charged by the Legislature and Governor to "assure the effective utilization of public postsecondary education resources, thereby eliminating waste and unnecessary duplication, and to promote diversity, innovation, and responsiveness to student and societal needs."

To this end, the Commission conducts independent reviews of matters affecting the 2,600 institutions of postsecondary education in California, including Community Colleges, four-year colleges, universities, and professional and occupational schools.

As an advisory planning and coordinating body, the Commission does not administer or govern any institutions, nor does it approve, authorize, or accredit any of them. Instead, it cooperates with other state agencies and non-governmental groups that perform these functions, while operating as an independent board with its own staff and its own specific duties of evaluation, coordination, and planning.

Operation of the Commission

The Commission holds regular meetings throughout the year at which it debates and takes action on staff studies and takes positions on proposed legislation affecting education beyond the high school in California. By law, the Commission's meetings are open to the public. Requests to address the Commission may be made by writing the Commission in advance or by submitting a request prior to the start of a meeting.

The Commission's day-to-day work is carried out by its staff in Sacramento, under the guidance of its director, Patrick M. Callan, who is appointed by the Commission.

The Commission issues some 30 to 40 reports each year on major issues confronting California postsecondary education, and it makes these publications available without charge while supplies last.

Further information about the Commission, its meetings, its staff, and its publications may be obtained from the Commission offices at 1020 Twelfth Street, Second Floor, Sacramento, CA 98514; telephone (916) 445-7933.

Policy Initiatives Addressing Declining Minority Enrollment in New Jersey Colleges and Universities

Fran S. Atchison*

I. MINORITY ENROLLMENT PROFILE

Since 1980 total (full- and part-time) undergraduate enrollment of black and Hispanic students combined declined by almost 3%.** This decline occurred within the context of a decline in overall enrollments of nearly 7%. However, the slower rate of decline for minorities is attributable solely to enrollment increases for Hispanics (through 1984), since black enrollment has fallen sharply.

Blacks: The number of black full-time undergraduate students in New Jersey's colleges and universities declined from 18,366 in 1980 -- the year in which the largest number of such students were enrolled -- to 14,237 in 1985, a decline of more than 4,000 students or 22.5%. By comparison, the number of full-time undergraduates declined by half that rate (11.5%) during the same period.

The decline occurred throughout the system, although its magnitude varied by sector and by institution. For example, more than one-half (54.8%) of the decline occurred in the community college sector, where eight of the 17 colleges in the sector lost more than one-third of their black students and three, more than one-half. Only 11% of the decline was accounted for by the eight state colleges, though one college accounted for more than one-half (53%) of this proportion. Variation also occurred among institutions in the year in which black enrollments peaked. Three community colleges experienced steady increases in black enrollment from at least 1980 through 1983, but have had declines since then. Only two of 27 colleges in the public sector have had consistent increases in black full-time undergraduate enrollments since 1980.

The decline in the number of black full-time undergraduates is not explained by changes in patterns of attendance status: there has not been a commensurate increase in part-time undergraduates. Part-time enrollment among black undergraduates has averaged about 10,950 students since 1980. As a proportion of total black undergraduate enrollment, however, part-time students increased from 37.3% in 1980 to 43.4% in 1985.

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*A special thanks to Kathleen Delehanty of the New Jersey Department of Higher Education for writing the section on the Minority Student Symposium.

**In New Jersey, the policy perspective focuses on blacks and Hispanics, because these are the policy-relevant groups for the state's higher education system. Of the two other racial/ethnic minority groups, the number of American Indian/Alaskan natives in New Jersey is extremely small, and the college participation rate of Asian-Americans is the highest (more than 70%) of all groups, both in New Jersey and for the nation as a whole.

There has also been a shift in the racial composition of students admitted through the Educational Opportunity Fund (EOF) program. The program was established to provide access for students who are economically and educationally disadvantaged. The intent was to provide access to those with a history of poverty, who traditionally had been excluded or underrepresented in higher education. Given the demographics, a large proportion of these were expected to be minorities, primarily black and Hispanic.

The racial profile of EOF students has been changing, however, and now a smaller proportion are black than was true when the program started. In 1981, 54.3% of EOF undergraduates were black; by 1985 the proportion had fallen to 44.9%. All of the other EOF racial/ethnic categories -- i.e., Puerto Rican, other Hispanic, Asian, and white -- had increases in both their number and proportion of students over this period.

One other trend in black enrollment is worth mentioning here: 55.2% of all undergraduates are women; but 63.7% of black undergraduates are women. This pattern is particularly significant since it has persisted both over time and across sectors.

Hispanics: In contrast to blacks, the pattern for Hispanics* has been one of increase, with full-time undergraduates increasing 23.2%, from 8,448 in 1980 to 10,407 in 1984. In 1985, however, the number declined for the first time, to 10,039 (a decrease of 3.5% from 1984, but still a net increase, since 1980, of 18.8%). The proportion of all full-time undergraduates who are Hispanic increased, from 5.5% in 1980 to 7.3% in 1984, and remained at that level in 1985. The number of Hispanic part-time undergraduates, however, increased throughout the period, from 4,023 students in 1980 to 5,456 in 1985, a growth of 35.6%.

II. INITIATIVES UNDERTAKEN IN 1985 TO ADDRESS THE PROBLEM

In December 1984, the Board of Higher Education endorsed a set of recommendations to address declining black enrollment: (1) a task force at each New Jersey public college to identify successful retention models and to outline a course of action specifically for black students; (2) a study by the EOF Board of Directors to determine the causes of the changing racial profile of EOF program participants; and (3) a symposium to address the issues of minority recruitment, retention, and increasing

*Hispanics are a heterogeneous group, and include Puerto Ricans -- whose educational and economic profile is similar to that of black Americans -- and other Hispanics who come from islands in the Caribbean, Central and South America, Mexico, and Spain. Most of New Jersey's statistics do not reflect this diversity, but increasingly, as new data bases are established, grouped Hispanic data are disaggregated.

the pool of college candidates. Each of these recommendations has since been implemented. In addition, on the recommendation of the Council of State Colleges, a survey was conducted to determine attitudes of the black community to higher education.

Task Force Reports: The college task force was to examine its institution's policies on recruitment and retention to determine how these might be related to minority enrollment patterns at the institution. Further, it was to describe any special efforts -- successful or not -- that the college had made (or had plans for) to strengthen its commitment to minority students. In his letter to the college presidents, the Chancellor of Higher Education, T. Edward Hollander, suggested that each task force draw its membership from admissions, financial aid, student services, and EOF personnel, as well as from the faculty, student government, and administration.

The reports confirm that for the majority of New Jersey's public institutions, mechanisms were not in place to address the minority enrollment crisis. Further, activities which colleges proposed to undertake tended to be uni-directional, for example, geared solely toward recruitment with very little attention focused on retention.

While New Jersey's independent colleges and universities were not required to submit reports, several of the presidents in the sector have written to the Chancellor of their experiences with minority students. Further, the Association of Independent Colleges and Universities in New Jersey has made minority enrollment a top priority and has encouraged its members to conduct activities similar to those requested of the public colleges.

EOF Research: To investigate the trend in the changing racial profile of EOF students, the EOF office of the Department of Higher Education analyzed its payment records for related trends in enrollemnt, retention, and family income. They also conducted a policy review of selected institutions, examining admissions and recruitment procedures and practices of EOF and non-EOF students.

The findings suggested very strongly that, with the exception of Rutgers, The State University, the decline in black EOF enrollment was primarily a retention problem; at Rutgers the decline was attributable to changes in recruitment policies. The analysis of income data indicated the decline did not result from the decision on the part of the EOF Board to raise the income eligibility ceiling above $12,000. In addition, a review of state grant amounts for EOF students indicated the amounts were inadequate. (Increased appropriations for the program -- recommended by Governor Kean -- will provide additional funds in the 1986-87 academic year.)

Finally, in light of some institutions' increasing use of EOF to serve low-income majority students (a trend highlighted in the policy review), the EOF Board also recommended a committee -- composed of

central office staff and EOF and financial aid directors from the colleges -- to develop a definition of "historical poverty" that would fulfill the original intent and spirit of the program. Based on the committee's research, the central office recommended to the EOF Board the following criteria for identifying a background of historical poverty. The student: 1) attends one of the lowest socioeconomic school districts in the state; or 2) resides in a "high distress" area as defined by the N.J. Office of Management and Budget; or 3) has a sibling who was or is enrolled in an EOF program; or 4) is eligible (or family is eligible) for federal government assistance and educational programs targeted toward low-income and disadvantaged populations (e.g., TRIO, summer youth employment, free and reduced breakfast/lunch, or food stamps programs) and is a first-generation college student.

Survey of Black Community Attitudes to Higher Education: As part of a major public awareness campaign, and in response to a recommendation of the Council of State Colleges, Response Analysis Corporation (RAC) of Princeton conducted research of attitudes, opinions, perceptions and values regarding higher education among New Jersey's black community. Three segments of the community were interviewed by telephone -- parents of teenagers 14 to 18 years old, the teenagers themselves, and young adults 19 to 29 years of age. This survey represents the first atttempt to gather essential information from the minority community. Indeed, a number of college task force reports noted the need for more localized surveys of this type. The study's findings indicate that the thrust of the state's policies must be directed toward those black (and no doubt, Hispanic) youth whose desires for college are not fulfilled.

Most notably, the findings indicate thant many black parents and teenagers in New Jersey want a college education for the teenagers. More than half (55%) of the parents specifically mention college when asked what their children might do after high school. Characteristics such as income and type of high school attended are associated with this finding. Generally, parents and teenagers who have college as a goal are in households: with at least one family member who has attended college; with higher incomes; with more than one adult; where the child has a high grade-point average; where the child goes to a racially mixed (as opposed to mostly black) or private high school. The findings also show that the black parents who want their children to go to college spend more time discussing plans with teachers and guidance counselors.

Some of the other important findings from the survey concern financing a college education. Among the college-bound group, a large majority of both parents and teenagers would consider taking a loan to go college. However, most are not aware of either EOF or the Tuition Aid Grant (TAG) program. In fact, the data indicate that financial aid does not become a priority until senior year in high school -- the majority of those saying they need financial aid have not yet looked into finding it. Further, parents of children not headed for college cite primarily financial reasons for the decision not to go. Unfortunately, respondents most in need of EOF and TAG (those with annual family incomes under $35,000) are the least likely to know about this aid, and the most likely to believe that financial aid is hard to get.

III. INITIATIVES UNDERTAKEN IN 1986 TO ADDRESS THE PROBLEM

Minority Student Symposium: The Minority Student Symposium considered and consolidated the many new initiatives of the Board and Department to address the decline in enrollment among black undergraduates. At the same time, the symposium was designed to help realize, by developing concrete, practical solutions, the spirit of those initiatives.

The symposium, held in January 1986, was a special opportunity to develop a consensus program of statewide and institutional initiatives to increase both black and Hispanic student participation in higher education. The format of the conference included discussion by 10-person task force groups composed of both campus and community representatives. Each of the groups was devoted to one of the symposium's four topics (college pool growth, recruitment, retention, and linguistic and cultural considerations), and participants sought consensus about viable solutions in their particular topic area. The following sections summarize the recommendations.

The recommendations of the task force on college pool growth focused on creating more positive attitudes toward education and on improving academic skills among elementary- and secondary-school students. Citing parents as role models and as major influences on students' attitudes, the task force groups suggested ways for colleges to promote parental involvement. The groups also called upon community organizations to foster an environment for learning. Stressing improved academic skills as essential to increasing the number of college-capable minority students, the task force recommended a variety of college activities, including better articulation with high schools and establishment of pre-collegiate programs. The task force underscored the importance of such efforts in recommending that the Department cooperate more closely with the Department of Education and that it "charge and challenge" institutions to develop pre-college programs.

The recruitment task force recommendations focused on maintaining continual interaction with potential students and their families and on enhancing the "marketability" of the institutions. For the most part, the suggestions were to expand and improve existing activities and agents in recruitment, and to target minority students by going to minority population centers and by featuring minorities in college publications and marketing efforts. Other suggestions for institutional implementation echoed the task force's overarching belief that the recruitment of minority students must be an institutionwide endeavor. The task force also suggested collaborative efforts with other colleges, with community organizations, and among community organizations. Two roles were recommended for the Department -- one, informational (for example, publish brochures helpful in filling out the various application forms) and the other, financial (establish special minority scholarship and/or loan programs).

The recommendations of the task force on retention focused primarily on creating an institutionwide environment that provides greater support and encouragement for students, on modifying financial aid guidelines to accommodate better the special needs of many minority students, and on developing information bases to monitor retention in colleges and to share information about successful programs. Like the recruitment task force, this task force viewed institutionwide commitment and involvement as essential, suggesting possible contributions to both intramural and extramural retention efforts. A key element was the need for comprehensive programs to support students during all their college years. Other recommendations included exit interviews to obtain more feedback on drop-outs and computer tracking systems. The task force also called on the Department to become an information resource center on retention programs, to develop model programs, to fund systems to measure program effectiveness, to allow additional semesters of financial aid eligibility, to create special aid programs for single-parent families, and to extend eligibility to part-time students.

The recommendations on cultural and linguistic considerations focused on recognizing diversity as a positive force in the education of all students, as well as on incorporating this diversity into educational policy. The task force called for both departmental and institutional awareness of and sensitivity to Hispanic issues over the next decade, consistent with the demographics, which are marked by rapidly emerging Hispanic subgroups. Accordingly, policy decisions, program development, and funding efforts should concentrate on second language acquisition and on academic programs necessary for the retention of Hispanic students. The task force also stressed the importance of faculty and staff to the academic success of Hispanic students, and recommended hiring more Hispanics and training non-Hispanics on cross-cultural issues. Finally, formalized outreach and articulation endeavors were recommended.

Resolutions Adopted by the Board of Higher Education: At its regularly scheduled meeting on March 21, 1986, the Board of Higher Education adopted several resolutions which addressed the issues of minority recruitment and retention.

The resolution requesting institutional activities called for each public institution to:

1) submit to the Department of Higher Education no later than June 1, 1986 a summary of its activities to increase minority enrollments in fall 1986 -- outlining specific recruitment and retention efforts the institution undertook during the past year for that purpose -- and also by June 1 to report on its activities for fall 1987 minority enrollments;

2) submit to the Department of Higher Education no later than January 1, 1987 a comprehensive strategic plan to address declining minority enrollments, both black and Hispanic, over the long term and in the context of its particular mission;

3) report annually to the Department of Higher Education on the institution's progress in implementing its plan;

4) establish a special committee of its board of trustees on minority enrollments to initiate policy recommendations and to monitor the college's progress in implementing its plan;

5) establish a permanent working group -- including policy-level administrators and faculty -- within the institution.

Board resolutions were also adopted establishing a "Special Committee on Minority" to examine policies and programs and to make recommendations to the entire Board of Higher Education; calling upon the Budget Committee of BHE, in considering budget requests for FY 1988, to take into account and report to the Board of Higher Education the current performance and anticipated activities of the institutions in minority recruitment and retention, as well as their commitment and past records in these areas; and calling upon the EOF and Student Assistance Boards to examine the feasibility of establishing urban scholarships, funding for part-time EOF students, and providing special financial aid for single parents. Finally, the Board called upon the New Jersey Association of Colleges and Universities to undertake private fundraising efforts in support of a minority student scholarship fund that will help high-achievement minority students meet their college-going costs.

Minority Enrollment

Indiana State Report

During 1984, the Indiana Commission for Higher Education examined minority enrollment trends in the state, and produced two reports as a result. The first, entitled "Minority Enrollment in Indiana Postsecondary Education - An Interim Report," showed that black enrollments in particular had been declining since 1980. Pages 12 and 13 which follow are taken from that report.

The second study, "Final Report on Minority Student Participation in Indiana Postsecondary Education," was issued later in 1984. This report resulted from consultations with college and university representatives, secondary school teachers, counselors, and administrators, state officials, black faculty and staff, and community leaders. It concluded with ten initiatives that the Commission recommended be undertaken to begin addressing the problem of low, and declining, minority enrollment in the state. Page 9 which follows provides a summary of the initiatives from that report. It is also described in more detail in the chapter, "Minority Participation in Indiana Higher Education - A Case Study," in W. Rosenthal and B. Yancey (Eds.), *The Uses of Data in Social Issues Cases*, New Directions for Institutional Research, No. 48 (1985).

Those wishing more detail of these studies should consult the reports themselves and/or the New Directions volume.

Commission for Higher Education

TABLE 6

ENROLLMENT TRENDS BY RACE AND INSTITUTION
1978-79 TO 1982-83 ANNUAL DATA

	1978-79	1979-80	1980-81	1981-82	1982-83	% Change 1978-79 to 1980-81	% Change 1980-81 to 1982-83	% Change 1978-79 to 1982-83
BLACK ENROLLMENT								
Indiana U.	7,738	7,779	8,277	7,965	7,584	7.0%	-8.4%	-2.0%
Purdue U.	2,754	2,888	2,993	3,030	2,841	8.7%	-5.1%	3.2%
Indiana State U.	1,516	1,533	1,708	1,516	1,398	12.7%	-18.1%	-7.8%
Ball State U.	1,244	1,139	1,182	1,103	1,029	-5.0%	-12.9%	-17.3%
Vincennes	356	447	490	524	510	37.6%	4.1%	43.3%
IVTC	4,262	4,961	6,061	5,657	5,498	42.2%	-9.3%	29.0%
Total Publics	17,870	18,747	20,711	19,795	18,860	15.9%	-8.9%	5.5%
Total Independents*	N.A.	N.A.	1,991	N.A.	1,886	N.A.	-5.3%	N.A.
TOTAL ENROLLMENT								
Indiana U.	96,910	98,176	104,598	104,888	106,129	7.9%	1.5%	9.5%
Purdue U.	58,317	61,402	65,117	65,684	65,067	11.7%	-0.1%	11.6%
Indiana State U.	19,655	20,327	21,281	21,369	21,066	8.3%	-1.0%	7.2%
Ball State U.	25,206	25,304	26,452	25,590	25,307	4.9%	-4.3%	0.4%
Vincennes	5,469	6,318	7,360	8,073	8,625	34.6%	17.2%	57.7%
IVTC	34,437	37,732	42,434	45,616	48,594	23.2%	14.5%	41.1%
Total Publics	239,994	249,259	267,242	271,220	274,788	11.4%	2.8%	14.5%
Total Independents*	N.A.	N.A.	50,804	N.A.	49,134	N.A.	-3.3%	N.A.

* 24 Institutions

Chart 3

Enrollment Trends for Blacks

in Public Institutions

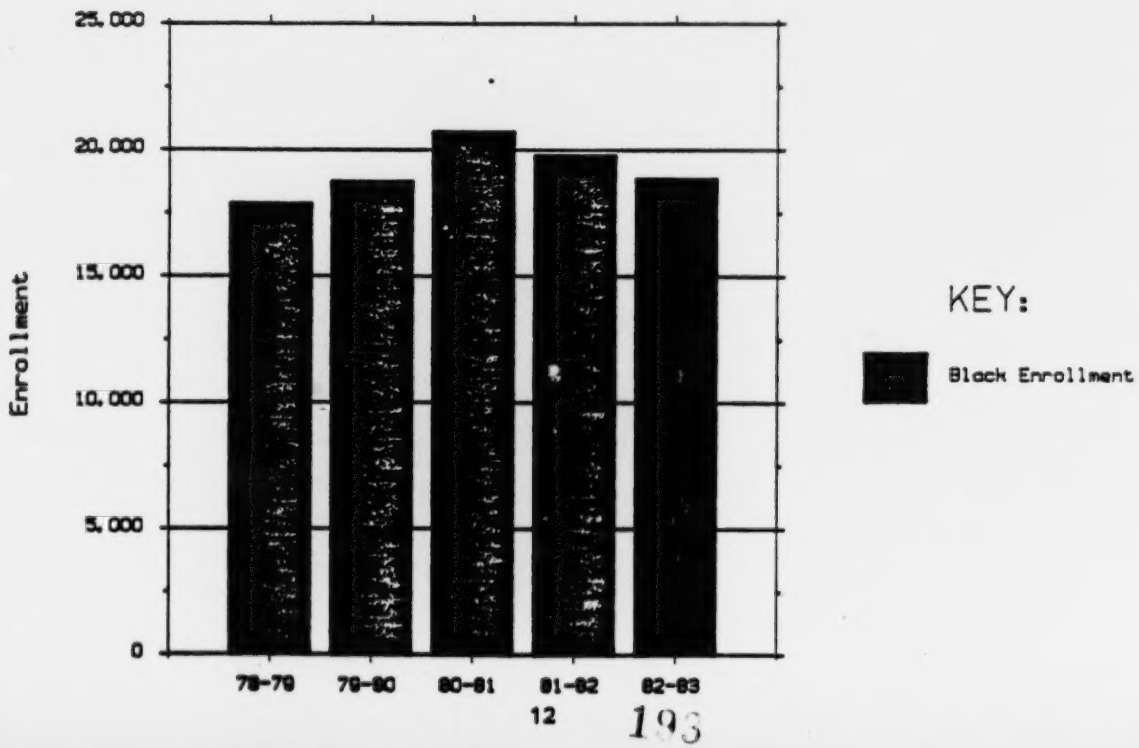


Chart 4

Enrollment Trends for Blacks by Institution

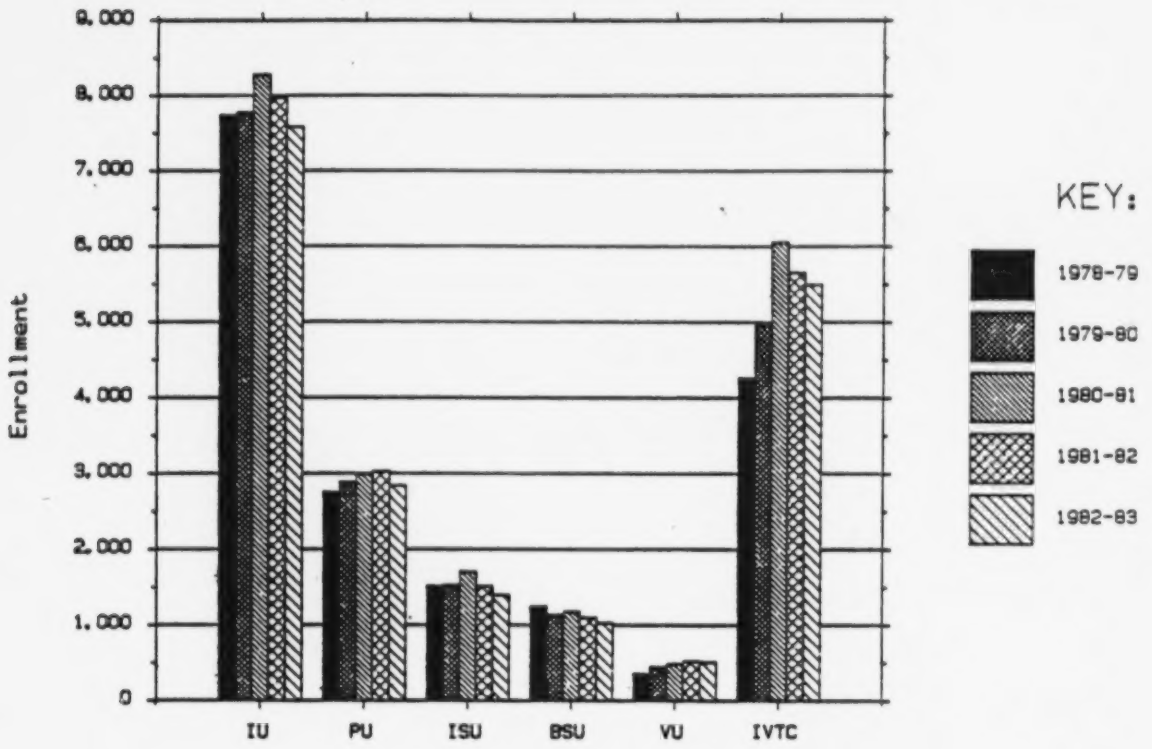
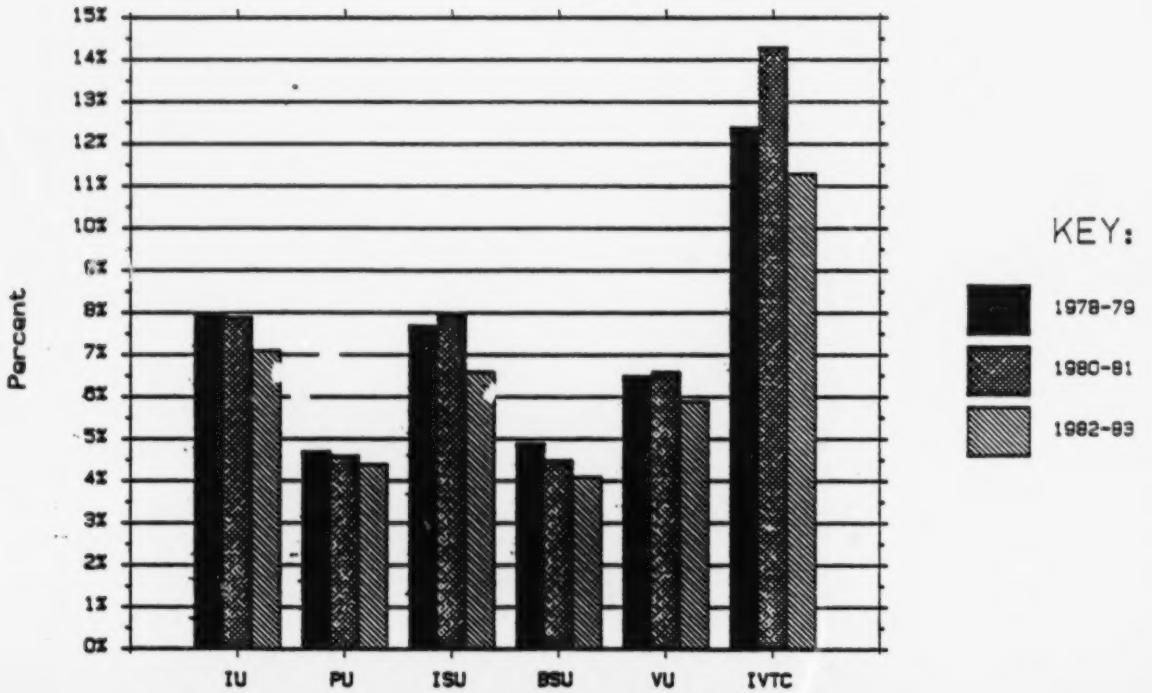


Chart 5

Proportion of Black Students at Each Public Institution for 78-79, 80-81, and 82-83



difficulties contribute to the problem of underrepresentation as well. In addition, each proposal is sufficiently focused to allow for its adoption without requiring that any other initiative be adopted.

The initiatives which follow are structured in such a way as to

(1) define the problem

(2) describe an initiative that might help alleviate the problem

(3) specify the target group or groups for the initiative

(4) suggest an organizational vehicle to carry out the initiative

The possible initiatives are not presented in a suggested order of preference.

Summary of Initiatives

Initiative	Description	Page
#1	Availability and Distribution of Student Financial Aid	10
#2	Establish Goals for Higher Education Participation Rates at the State and School Corporation Levels	11
#3	Improving Counseling for College Attendance and Work	12
#4	Partnership for Increased Participation	15
#5	Grants for Tuition Payments for Minorities	17
#6	Recommended College Preparatory Curriculum for High School Students	18
#7	Learning Contracts Between Parents, Students, and Schools	19
#8	Statewide Articulation of Benefits of Higher Education	21
#9	Expanded Use of Campus Visits and Pre-Collegiate Activities for Recruitment of Minority Students	22
#10	Improvement and Monitoring of Data on Minority Participation	23

State of Illinois
Board of Higher Education

DATA AND POLICIES RELATED TO PARTICIPATION IN ILLINOIS HIGHER EDUCATION BY RACIAL/ETHNIC BACKGROUND

May 1986

Table A

PERCENTAGES OF BLACKS AND HISPANICS
IN ILLINOIS AND IN VARIOUS
LEVELS OF EDUCATION

	Percent Black	Percent Hispanic
ILLINOIS POPULATION (1980 Census)	14.5%	5.6%
PUBLIC SCHOOLS (1984-85)		
Total Elementary/Secondary Enrollment	21.7	7.6
High School Graduating Class	15.2	4.2
COMMUNITY COLLEGES		
Total Enrollment (1984)	17.5	5.8
Certificates Awarded (1982-83)	17.3	4.3
Associate Degrees (1982-83)	9.8	1.8
PUBLIC UNIVERSITIES		
Undergraduate		
Total Enrollment (1984)	11.2	2.8
Bachelor Degrees (1982-83)	6.2	1.6
Graduate		
Total Enrollment (1984)	6.4	1.7
Masters Degrees (1982-83)	6.7	1.6
Doctoral Degrees (1982-83)	3.3	1.2
Professional Degrees (1982-83)	2.9	1.9
PRIVATE COLLEGES AND UNIVERSITIES		
Undergraduate		
Total Enrollment (1984)	11.6	4.6
Bachelors Degrees (1982-83)	7.8	1.6
Graduate		
Total Enrollment (1984)	3.9	1.4
Masters Degrees (1982-83)	5.5	1.6
Doctoral Degrees (1982-83)	2.1	1.2
Professional Degrees (1982-83)	3.0	1.9
ILLINOIS MONETARY AWARDS (1984-85)		
Community Colleges	46.5	5.2
Public Universities	27.2	5.7
Private Colleges and Universities	20.2	9.8

Source: Illinois Board of Higher Education

Table 1

TOTAL ENROLLMENT BY RACIAL/ETHNIC CATEGORY AND SECTOR

	Fall 1976	Fall 1977	Fall 1978	Fall 1979	Fall 1980	Fall 1981	Fall 1982	Fall 1983	Fall 1984
White, Non-Hispanic	469,411	419,099	434,873	449,117	501,516	521,678	540,797	528,864	519,575
Community Colleges	232,979	192,120	198,411	197,366	231,698	263,394	269,948	258,435	249,207
Public Universities	144,219	139,340	133,275	146,014	150,223	149,077	148,178	145,554	144,887
Undergraduate	111,320	111,769	108,783	112,875	115,102	115,132	114,807	112,664	112,417
Graduate	32,899	27,571	24,492	33,139	35,121	33,945	33,371	32,890	32,470
Private Institutions	92,213	87,639	103,187	105,737	119,595	109,207	122,671	124,875	125,481
Undergraduate	67,091	60,776	73,796	73,693	83,244	75,639	84,436	86,511	86,398
Graduate	25,122	26,863	29,391	32,045	36,351	33,568	38,235	38,364	39,083
Black, Non-Hispanic	89,901	69,196	81,812	82,791	90,779	99,101	98,678	87,581	97,743
Community Colleges	57,182	38,467	50,072	47,795	55,718	62,395	63,841	53,303	63,356
Public Universities	19,257	19,743	19,621	20,886	20,435	20,040	19,553	19,223	19,104
Undergraduate	15,791	16,605	16,565	17,327	17,220	16,916	16,660	16,382	16,230
Graduate	3,466	3,138	3,056	3,559	3,215	3,124	2,893	2,841	2,874
Private Institutions	13,462	10,986	12,119	14,110	14,626	16,666	15,284	15,055	15,283
Undergraduate	11,679	8,841	10,204	12,683	12,660	14,792	13,470	13,328	13,430
Graduate	1,783	2,145	1,915	1,427	1,966	1,874	1,814	1,727	1,853
Hispanic	19,586	11,575	19,452	21,002	26,801	30,408	30,548	26,976	31,757
Community Colleges	14,788	5,782	13,372	13,659	18,459	20,739	20,382	16,489	21,065
Public Universities	2,368	3,513	3,617	4,194	4,468	4,549	4,639	4,697	4,768
Undergraduate	2,042	3,046	3,202	3,590	3,801	3,901	3,923	3,951	4,006
Graduate	326	467	415	604	667	648	716	746	762
Private Institutions	2,430	2,280	2,463	3,149	3,874	5,120	5,527	5,790	5,924
Undergraduate	2,062	1,809	2,019	2,651	3,308	4,574	4,905	5,109	5,276
Graduate	368	471	444	498	566	546	622	681	648
Asian or Pacific Islander	7,854	7,266	12,535	11,695	16,526	19,138	19,936	19,347	21,874
Community Colleges	4,333	2,225	7,358	5,352	8,516	10,464	9,997	9,181	10,658
Public Universities	1,932	2,512	2,642	3,560	4,248	4,760	5,325	5,603	6,020
Undergraduate	1,553	2,033	2,140	2,793	3,323	3,820	4,291	4,518	4,843
Graduate	379	479	502	767	925	940	1,034	1,085	1,177
Private Institutions	1,589	2,529	2,535	2,783	3,762	3,914	4,614	4,563	5,196
Undergraduate	1,106	1,516	1,640	1,808	2,521	2,797	3,205	3,134	3,589
Graduate	483	1,013	895	975	1,241	1,117	1,409	1,429	1,607

Table 1 (continued)

TOTAL ENROLLMENT BY RACIAL/ETHNIC CATEGORY AND SECTOR

	Fall 1976	Fall 1977	Fall 1978	Fall 1979	Fall 1980	Fall 1981	Fall 1982	Fall 1983	Fall 1984
American Indian/Alaskan	1,808	2,193	1,680	3,076	4,741	3,450	2,824	2,247	2,284
Community Colleges	1,240	1,589	1,032	2,282	3,964	2,701	1,997	1,469	1,471
Public Universities	389	462	456	495	542	486	531	451	416
Undergraduate	312	382	380	401	429	397	445	369	337
Graduate	77	80	76	94	113	89	86	82	79
Private Institutions	179	142	192	249	235	263	296	327	397
Undergraduate	131	104	150	211	176	218	224	252	333
Graduate	48	38	42	38	59	45	72	75	64
Other/No-Indication	60,077	107,770	91,515	81,617	73,855	71,034	51,853	46,631	41,105
Community Colleges	7,489	60,862	52,122	37,198	40,692	26,820	21,657	17,766	15,430
Public Universities	19,221	11,354	15,238	13,505	15,209	16,487	17,045	14,983	14,579
Undergraduate	11,232	6,961	7,988	7,022	8,481	9,143	9,426	8,516	7,257
Graduate	7,989	4,393	7,250	6,483	6,728	7,344	7,619	6,467	7,322
Private Institutions	33,367	35,554	24,155	10,914	17,954	27,727	13,151	13,882	11,096
Undergraduate	19,788	27,810	14,745	6,765	11,745	18,478	8,788	9,166	6,915
Graduate	13,579	7,744	9,410	4,149	6,209	9,249	4,363	4,716	4,181
TOTAL	648,637	617,099	641,867	649,248	714,218	744,809	744,636	711,646	714,338
Community Colleges	318,011	301,045	322,367	323,652	359,047	386,513	387,822	356,643	361,187
Public Universities	187,386	176,924	174,849	188,654	195,125	195,399	195,271	190,511	189,774
Undergraduate	142,250	140,796	139,058	144,008	148,356	149,309	149,552	146,400	145,090
Graduate	45,136	36,128	35,791	44,646	46,769	46,090	45,719	44,111	44,684
Private Institutions	143,240	139,130	144,651	136,942	160,046	162,897	161,543	164,492	163,377
Undergraduate	101,857	100,856	102,554	97,810	113,654	116,498	115,028	117,500	115,941
Graduate	41,383	38,274	42,097	39,132	46,392	46,399	46,515	46,992	47,436

Notes: [a]Fall 1976 is on and off-campus. Fall 1977 and Fall 1978 are on-campus only. Fall 1979 to Fall 1982 include on and off-campus and home study enrollments.

[b]Fall 1977 racial/ethnic data do not correspond to the IBHE Data Book because Keller Graduate School of Management, Garrett-Evangelical Seminary, and Blackburn College submitted these data after the book was published. Total enrollment figures remain unchanged.

[c]Fall 1977 does not include Chicago City Colleges Urban Skills Institute which for Fall 1976 had a total of 37,771 students of whom 17,753 were Black and 8,687 were Hispanic.

Source: I.B.H.E., HEGIS: Fall Enrollment and Compliance Report.

Table 2

BLACK AND HISPANIC ENROLLMENTS AS PROPORTIONS OF ENROLLMENTS IN EACH SECTOR

	Fall 1976	Fall 1977	Fall 1978	Fall 1979	Fall 1980	Fall 1981	Fall 1982	Fall 1983	Fall 1984
Black, Non-Hispanic	13.9%	11.2%	12.7%	12.8%	12.7%	13.3%	13.3%	12.3%	13.7%
Community Colleges	18.0	12.8	15.5	14.8	15.5	16.1	16.5	14.9	17.5
Public Universities	10.3	11.2	11.2	11.1	10.5	10.3	10.0	10.1	10.1
Undergraduate	11.1	11.8	11.9	12.0	11.6	11.3	11.1	11.2	11.2
Graduate	7.7	8.7	8.5	8.0	6.9	6.8	6.3	6.4	6.4
Private Institutions	9.4	7.9	8.4	10.3	9.1	10.2	9.5	9.4	9.4
Undergraduate	11.5	8.8	9.9	13.0	11.1	12.7	11.7	11.3	11.6
Graduate	4.3	5.6	4.5	3.6	4.2	4.0	3.9	3.7	3.9
Hispanic	3.0	1.9	3.0	3.2	3.8	4.1	4.1	3.8	4.4
Community Colleges	4.7	1.2	4.1	4.2	5.1	5.4	5.3	4.6	5.8
Public Universities	1.3	2.0	2.1	2.2	2.3	2.3	2.4	2.5	2.5
Undergraduate	1.4	2.2	2.3	2.5	2.6	2.6	2.6	2.7	2.8
Graduate	0.7	1.3	1.2	1.4	1.4	1.4	1.6	1.7	1.7
Private Institutions	1.7	1.6	1.7	2.3	2.4	3.1	3.4	3.5	3.6
Undergraduate	2.0	1.8	2.0	2.7	2.9	3.9	4.3	4.3	4.6
Graduate	0.9	1.2	1.1	1.3	1.2	1.2	1.3	1.4	1.4

Notes: [a]Proportions are based on data in Table 1.

Source: I.B.H.E., HEGIS: Fall Enrollment and Compliance Report.

Table 3

ILLINOIS MONETARY AWARD RECIPIENTS
BY RACIAL/ETHNIC CATEGORY AND SECTOR

	FY1978	FY1979	FY1980	FY1981	FY1982	FY1984
White, Non-Hispanic	54,796	56,497	51,734	55,243	50,451	58,262
Community Colleges	10,326	10,895	9,557	10,814	10,855	15,481
Public Universities	20,658	20,445	16,988	19,791	16,559	20,796
Private Institutions	23,812	25,157	25,189	24,638	23,037	21,985
Black, Non-Hispanic	32,233	32,579	32,270	29,318	31,231	32,923
Community Colleges	12,646	12,426	11,573	10,808	12,930	16,527
Public Universities	9,940	9,974	9,860	9,209	8,681	9,477
Private Institutions	9,647	10,179	10,837	9,301	9,620	6,919
Hispanic	4,507	5,018	5,157	5,359	6,347	6,903
Community Colleges	1,025	1,141	1,110	1,116	1,379	1,811
Public Universities	1,730	1,754	1,627	1,749	1,674	2,001
Private Institutions	1,752	2,123	2,420	2,494	3,294	3,091
Asian or Pacific Islander	1,561	2,080	2,270	2,541	3,227	4,334
Community Colleges	263	381	392	443	758	1,529
Public Universities	723	921	973	1,089	1,204	1,791
Private Institutions	575	778	905	1,009	1,265	1,014
American Indian or Alaskan	587	690	807	974	1,036	545
Community Colleges	181	216	260	323	384	339
Public Universities	187	222	249	317	292	97
Private Institutions	219	252	298	334	360	109
Other/No Indication	2,640	2,374	2,002	2,049	2,521	4,927
Community Colleges	589	585	499	510	737	2,110
Public Universities	1,064	910	687	724	749	1,253
Private Institutions	987	879	816	815	1,035	1,564
Total	96,324	99,238	94,240	95,484	94,813	107,894
Community Colleges	25,030	25,644	23,391	24,014	27,043	37,797
Public Universities	34,302	34,226	30,384	32,879	29,159	35,415
Private Institutions	36,992	39,368	40,465	38,591	38,611	34,682

Notes: [a]Totals double count some recipients who transferred between sectors during the year. Those for whom a Sector was not indicated are excluded from these data.

[b]FY1983 data are not available because of a change in the application form. In that year, ISSC began using the federal form which does not collect racial/ethnic data. Racial/ethnic data are now collected separately from the application form.

[c]FY1984 includes estimates for Chicago State University, Sauk Valley Community College, College of DuPage and Thornton Community College. The estimates distribute 1984 recipients among racial/ethnic categories based upon the distribution of 1982 recipients among those categories.

Source: IBHE based upon information provided by ISSC.

Table 4

BLACKS AND HISPANICS AS PROPORTIONS OF TOTAL ILLINOIS MONETARY AWARD RECIPIENTS BY SECTOR

	FY1978 Percent	FY1979 Percent	FY1980 Percent	FY1981 Percent	FY1982 Percent	FY1984 Percent
Black, Non-Hispanic	33.5%	32.8%	34.2%	30.7%	32.9%	30.5%
Community Colleges	50.5	48.5	49.5	45.0	47.8	43.7
Public Universities	29.0	29.1	32.5	28.0	29.8	26.8
Private Institutions	26.1	25.9	26.8	24.1	24.9	19.9
Hispanic	4.7	5.1	5.5	5.6	6.7	6.4
Community Colleges	4.1	4.4	4.7	4.6	5.1	4.8
Public Universities	5.0	5.1	5.4	5.3	5.7	5.7
Private Institutions	4.7	5.4	6.0	6.5	8.5	8.9

Note: Proportions based on data in Table 3.

Source: IBHE based upon information provided by ISSC.

State of Illinois
Board of Higher Education

Policies Adopted July 1985

1. The Board of Higher Education concludes that an intensified and sustained commitment to increasing minority participation and success in Illinois higher education is required. Such a commitment includes increasing minority employees and planning programs and allocating resources to achieve the priorities listed below.

2. The Board of Higher Education resolves that the following should be among the highest priorities for Illinois colleges and universities:

a) Assist schools with efforts to increase the high school completion rate for minorities;

b) Prepare more minority high school students for baccalaureate degree programs;

c) Increase the baccalaureate degree completion rate for minorities;

d) Expand professional development opportunities for minorities in fields leading to graduate and professional degrees, especially in fields emphasizing mathematics and the sciences.

3. The Board of Higher Education resolves that a special policy study should be conducted of student financial assistance programs with emphasis on the ways in which dependence on student loans and changes in federal assistance affect students' access and choice in higher education.

4. The Board of Higher Education resolves that institutions of higher education should regularly review and evaluate the effectiveness of programs and activities to increase minority participation and success, conduct research into the reasons for the academic success or failure of their minority students, and report the results to the Board in accordance with the focus of the priorities identified in this report.

Procedures Adopted May 1986

1. The Board of Higher Education hereby resolves that public universities and community colleges should develop institutional plans and goals to improve the participation and success of minority, female, and handicapped students in academic programs. Such plans should be submitted to the appropriate governing or system board by July 1, 1987 for review and regular monitoring.

2. The Board of Higher Education further resolves that public university governing boards and the Illinois Community College Board should report periodically to the Board of Higher Education assessments of progress toward institutional goals. Such reports should also include information on institutional research findings about the reasons for the success or failure of minority, female, and handicapped students in academic programs.

3. The Board of Higher Education adopts the following reporting procedures for minority students:

a. Annual reports on the number of minority students enrolling, receiving financial aid, and receiving degrees for all community colleges combined, all public universities combined, and all private institutions combined.

b. Annual reports on the number of minority students enrolling in each field of study for all community colleges combined, all public universities combined, and all private institutions combined.

c. Annual reports on individual community colleges and public universities with respect to minority students enrolled and receiving degrees.

d. Annual reports on special community college and public university programs or activities to achieve Board of Higher Education priorities related to minority students.

Blacks in Higher Education:

The View from New York

Presented by

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at the

NASSGP/NCHELP Student Financial Aid Research Network
Third Annual Conference
Chicago, Illinois
May 29, 1986

We have heard today about declines in Black enrollment in higher education nationally and regionally during the 1980s. The evidence from New York, though not conclusive, suggests a somewhat different picture. Degree-credit enrollment data for New York State institutions of higher education are collected in the even-numbered years by the State Education Department. In fall 1980, there were 105,735 Blacks enrolled for degrees in New York. They comprised 10.9 percent of the total 966,726 enrollment with ethnic designations available. In 1982, the number of Black enrollees had dropped slightly to 104,653, 10.8 percent of the relevant total, 966,184. However, by fall 1984 the number of Blacks had increased to 107,343, 11.3 percent of the total 949,237 degree-credit enrollment with ethnicities designated. The above figures include both full-time and part-time enrollment for either undergraduate or graduate degrees.

The picture is not completely clear due to several missing elements. For fall 1984, about 15,000 degree-credit enrollees in the independent nonprofit sector had no ethnicity reported. This is a number large enough to affect the overall percentage of Blacks statewide either positively or negatively depending on how many Blacks are actually in the unreported group. Changes in the sector distribution of Black students between 1980 and 1984 cannot be described definitively for the same reason. Secondly, figures for the nondegree proprietary sector are not included in the data set. Like the degree proprietary sector, the nondegree proprietary sector historically serves a relatively high proportion of Black students. Therefore, a clearer picture of the overall participation of Blacks in higher education and student financial aid in the state would require the consideration of nondegree proprietary sector enrollments by ethnicity, which are currently unavailable. Finally, the size of the college-eligible pool of Blacks may also be increasing.

The 1981-82 Student Survey* conducted by the New York State Higher Education Services Corporation showed that Black students and other minorities were more likely than Caucasians to have low incomes and to be financially independent of their parents. Low-income students, including minorities, were more reliant on need-based grants for educational financing, were less likely to use student loans, and more often evidenced substantial "need gaps" between their costs and aid. Blacks were the respondent ethnic group most likely to consider financial aid essential to their educations. The survey also suggested that students were not, on the whole, sophisticated enough about the various program eligibility requirements to understand whether or not their own financial aid was likely to be cut when exposed to media accounts of declines in federal funding support

* See "Aid & Access: The Role of Financial Aid in Access to Postsecondary Education for Different Ethnic Groups in New York State." New York State Higher Education Services Corporation, Division of Policy Analysis and Information Services, Albany, New York 12255, 1984, 72 pages.

for student financial aid.

These findings, juxtaposed against the severe federal stance on educational spending, were the basis for a series of innovative information services efforts designed to maintain students' confidence in the financial aid system during the past several years. Financial aid brochures were distributed through a network of community-based organizations which included public libraries, churches, United Way service organizations, youth centers, women's groups, ethnic advocacy organizations, veterans' groups, Chambers of Commerce, and labor unions. The President of NYSHESC, Dr. Dolores E. Cross, appeared at numerous public functions and on a financial aid call-in television program. An early pre-college awareness program based on community-sponsored events was designed to encourage family financial planning and disseminate knowledge of financial aid.

Furthermore, the Corporation has made available a Financial Aid Estimator diskette to high school guidance offices, libraries, banks and colleges around the state. The Financial Aid Estimator is an interactive software package that allows students and parents to obtain estimates of how much financial aid they could receive from the TAP and GSL programs. It has been provided as a public service at locations where IBM or Apple personal computers are in use.

The news about state-level financial aid spread through the new networks, as well as through more conventional channels, has been good. New York State's need-based entitlement program, the Tuition Assistance Program or TAP, continues to provide a generous floor of support for higher education participation by low-income students. In 1984, the minimum TAP grant for financially dependent undergraduates rose from $250 to $300. The maximum, received by students at the lowest taxable income level, climbed from $2200 to $2700 (or tuition, whichever is less) for financially dependent undergraduates attending nonprofit institutions. The net taxable balance income eligibility ceiling for dependent undergraduates was also increased from $25,000 to $29,000. In 1986 TAP was further enriched by $31 million for undergraduates and $6 million for graduate students. The total appropriation for TAP was $416,950,000 (including $6,450,000 from SSIG matching funds).

Scholarship programs were enriched by $6 million, including $2 million for 1,000 new "Scholarships of Excellence" for outstanding high school seniors; $2 million to expand to 200 the number of Health Services Corps Scholarships for students studying to become health care professionals; $1 million for 250 additional Empire State Challenger Scholarships and Fellowships for potential teachers; and $925,000 to increase to 100 each the number of Regents Health Care Opportunity Scholarships and Regents Professional Opportunity Scholarships for disadvantaged students studying to become doctors, dentists, and other medical practitioners. In addition, funding for the Aid for Part-Time Study (APTS) Program continued at $11 million.

Legislation was approved in 1985 which allowed students with defaulted loans to regain aid eligibility under certain conditions. The Regents Loan Forgiveness Program was enacted, providing repayment of student loans for physicians practicing in doctor-shortage areas of the state. Vietnam Veterans Tuition Awards (VVTA) were expanded to include vocational training. The program, which began in 1984, offers eligible veterans $250 to $500 per semester for undergraduate-level study.

While New York State, under the leadership of Governor Mario Cuomo, has remained firm in its commitment to the support of higher education and minority participation, federal funding priorities during the 1980s have clearly shifted away from education and other domestic concerns. Not only have student financial aid and related support systems for higher education been eroded, but there have also been losses in the areas of income maintenance programs, student lunches, and child care for the working poor. This may result in a kind of "double jeopardy" for minorities and low-income Caucasians who face multiple disadvantages in attempting to participate in the higher education system.

According to 1981-82 NYSHESC Student Survey data, as many as one-fifth of the Black and Hispanic students in higher education in the state were Special Opportunity Program grant recipients. The Special Opportunity Programs are known as College Discovery (CD) and Search for Elevation and Education through Knowledge (SEEK) in The City University of New York (CUNY) system, the Educational Opportunity Program (EOP) at the State University of New York (SUNY), and the Higher Education Opportunity Program (HEOP) in the independent sector. They serve students who are both economically and academically disadvantaged. Telephone interviews of Student Survey sample members who received Special Opportunity Program moneys revealed that they tended to face interfering personal problems such as crowded living conditions, lack of child care, or responsibilities for younger siblings or for their own parents. The interaction effect of financial, academic, and interfering personal problems may have a strongly negative influence on persistence in higher education.

The problem of Black under-representation in higher education is severe. Despite New York's apparently holding the line on overall Black enrollments, at the Higher Education Services Corporation we are not complacent. While an encouraging trend has been noted in the college-going rates of Black high school graduates in the state, access and retention are still major concerns. The Corporation will continue to emphasize information services in its administration of New York State's financial aid programs. The goal is to maximize equity, access, and choice in the educational preparation necessary for personal and societal success in a technologically complex world.

THE ENROLLMENT OF BLACK STUDENTS IN HIGHER EDUCATION: A POTENTIAL IN PERIL

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THE ENROLLMENT OF BLACK STUDENTS IN HIGHER EDUCATION: A POTENTIAL IN PERIL

The SREB Interest

The Southern Regional Education Board (SREB) was founded in 1948 by an interstate compact now ratified by 15 states.* SREB's purpose is to aid in the social and economic advancement of the SREB states by assisting states to improve higher education, to provide the widest possible opportunity for higher education, and to provide regional support and utilization of advanced educational programs and facilities.

Since 1981, SREB has emphasized educational reform and quality improvement, particularly in relation to the transition of students from high school to college. The need to re-establish meaningful entry, progress and exit standards for students in higher education is a clear priority. According to recent estimates from the region and around the nation as many as half of all entering college students are unprepared academically. Better means of assessing student achievement are needed as new forms of educational accountability and quality emerge--accountability on the basis of the demonstrated achievement of students, not just on financial criteria and quality judgements on the basis of student achievement, not just on the basis of selectivity (1, 2, 15, 16).

The emphasis on educational reform and quality improvement has not been at the expense of a comittment to access. Progress must also be measured in terms of participation and access. Policies which merely exclude students as a way of improving measured levels of achievement do not promote educational progress or serve the public interest. The greatest challenge is to find ways that will enable both access and quality goals to be met at the same time for the same students (1, 2, 15, 16).

With smaller high school-aged cohorts coming along with higher minority representation in them and with continuing structural shifts in the economy from an agricultural, mining and manufacturing base to a service and trade base, it is far more important now than ever before to have higher participation and success rates in higher education. Access must continue to be promoted but will be a hollow achievement if it is not access to a quality education (8).

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* SREB member states include: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

Enrollment Trends

By nov the main outlines of the trends in the enrollment of black students are widely reported and recognized. From the mid-1960s to the mid-1970s, black student enrollments grew rapidly. Yearly gains in the enrollment of black students reached a plateau in the mid-1970s. Since then, the rate of increase in the enrollment of black students in colleges has trailed the rate of increase for total enrollment by a larger and larger margin. Unless current trends are reversed, there will be fewer black students in higher education in 1990 than there are today (6, 8).

The most recent data (1980 to 1984) reveal that the nationwide declines in the enrollment of black students are more severe than those in the SREB states. Nationwide, the number of black students enrolled in higher education reached a record level of 1.1 million in 1980. In 1984, there were 10.3 percent fewer black students. Since 1976, black representation in higher education has fallen from 9.3 percent to 8.0 percent. In the SREB states, the number of black students increased to over 462 thousand in 1982 but has fallen 0.3 percent since. Black representation in higher education in the SREB states has fallen from 15.1 percent in 1976, to 13.7 percent in 1984 (6, unpublished HEGIS data).

Predominantly black colleges and universities have been the most severely affected by these declines. There were 14.8 percent fewer black students in predominantly black institutions in 1984 than there were in 1980. Total enrollment in predominantly black institutions fell 16.5 percent between 1980 and 1984. In the SREB states the total enrollment in predominantly black colleges and universities fell 5.0 percent between 1980 and 1984 with a 6.1 percent decline in black enrollment (6, unpublished HEGIS data).

The enrollments of black undergraduate students has fallen the most (15.9 percent) followed closely by declines in the numbers of black graduate students (15.2 percent). In contrast, the number of black first-professional students rose 1.9 percent between 1980 and 1984. In the SREB states the undergraduate enrollment of black students fell 3.9 percent, the graduate enrollments fell 6.4 percent and first-professional enrollments rose 9.7 percent (6, unpublished HEGIS data).

The enrollment trends shov that even before the quality improvement era the participation rates of black students in higher education vere stalling. Since it is clear that some quality improvement measures can negatively affect the achievement of the access goal, it becomes essential to examine the factors that may affect the enrollment of black students in higher education.

Factors Affecting Enrollments

Demographics

The size of the high school-age black population declined 2.4 percent between 1976 and 1982 and another 2.2 percent by 1984. The high school enrollment of this population decreased at a higher rate--6.1 percent between 1976 and 1982 and another 3.1 percent by 1984. The number of black high school graduates, however, rose 8.6 percent between 1976 and 1982 and another 3.1 percent by 1984. In short, the high school enrollment rate of black high school-age students is declining and increases in the high school graduation rate are tapering (8, 17).

The demographic prospects for increasing the number of blacks completing high school are not good. The number of elementary and secondary school-age blacks has also been declining. Thus it appears that the only way to increase the college-eligible pool of young black students is to promote increases in the percentages of black students who attend and graduate from high school and by promoting an increase in the percentage of black high school graduates who attend college.

In 1976, 49.2 percent of black 18- to 19-year old high school graduates attended college (the same as the rate for comparable white students). By 1984, the participation rate of black students was down to 38.5 percent while the rate for white students was up to 54.9 percent (8, 17). Were the college-going rates of black students to increase to the rates for white students there would have been no declines in the enrollment of black students in higher education. However, the college-going rates of black and white high school graduates are diverging not converging. Additional factors such as academic preparation and student financial aid may help explain this divergence.

Academic Preparation

The preponderance of evidence supports the proposition that academic preparation (a college preparatory curriculum) and academic performance are the most important factors in promoting college attendance for both black and white students (10). The most definitive studies (National Longitudinal Study and High School and Beyond) show persistent gaps between the academic preparation and performance levels of black and white students (9, 11). Only 33 percent of black seniors were enrolled in the college preparatory curriculum compared to 45 percent of white seniors (9). Among white seniors, 81 percent had taken algebra I and 50 percent had taken algebra II. In contrast, 68 percent of black seniors had taken algebra I and 39 percent had taken algebra II (11).

Perhaps the most revealing evidence comes from a 1985 pilot program between SREB and the National Assessment of Educational Progress (NAEP). For the first time, comparisons between the reading proficiencies of high school juniors at the state, regional, and national levels were possible. The results show that the average reading proficiency of 17 year-old black students (eleventh-graders) was just above the average for 13 year-old white students (seventh-graders). Only 20.1 percent of the nations' and 17 percent of the South's black eleventh-graders posses reading proficiency judged adequate for college-level work compared to 52.7 percent of the nation's and 55.8 percent of the SREB state's white eleventh-graders (14).

Student Financial Aid

It is widely recognized that the substantial increases in the enrollment of black students in higher education which continued until the mid-1970s was stimulated by needs-based student financial aid programs. By 1976, for example, minority representation in federal aid programs was two and one-half times greater than minority representation among college students--ranging from 43 percent in the Pell Grant Program to 17 percent in the Guaranteed Student Loan Program. (Roughly 60 percent of minority students are black.)

Since the mid-1970s, constant dollar growth in loan programs has exceeded growth in grant programs. This shift was a result of the Middle Income Student Assistance Act (MISAA). The proportion of aid recipients from minority groups in the Pell (BEOG) Program fell from a high of 48 percent in 1974-75 (12). By 1981-82, only 32 percent of aid (both grant and loan) recipients in public colleges were from minority groups. By 1983-84 minorities made up only 29 percent of recipients (6). Financial aid has been made available to a wider variety of students and the amounts of available aid have been spread thinner. A Pell Grant would have to equal over $3,000 today to be equivalent to the $1,600 maximum in 1974 but stands at only $2,100 (4).

Since the implementation of the Middle Income Student Assistance Act, the complexity of the student aid scene has increased and there is strong evidence of a maldistribution of student aid resources. A comprehen ive stuov of aid recipients in Georgia revealed that abo t 23 perce.t of students in the pool of applicants for needs-based aid had overmet need (uniform methodology), 70 percent had unmet need and 7 percent had their need met exactly. Unmet need in the state was estimated to be $17 million and overmet need $11 million (5).

Research from many quarters supports the thesis that the types and amounts of financial aid offered to black students plays an important role in their enrollment and persistence in college. Clearly, changes in the distribution of student financial aid brought about by the implementation of MISAA have affected the enrollments of black students in colleges and universities.

Changes in student financial aid programs, while helpful, should not be viewed as the primary means of promoting the access of black students to higher education. Until preparation levels are improved substantially, significant numbers of black students will not persist in their education even with financial incentives. As one wit put it, without scholarship, scholarships do not help. Additional funds can only make marginal differences in influencing the enrollment behavior of black students so long as the academic disadvantages persist.

Efforts to Improve Academic Preparation

A number of promising projects are underway that are designed to promote improved academic preparation and aspiration of minority youths. The McKnight Foundation is supporting in Florida, with $10 million, a state/local school/community agency cooperative effort to establish afterschool homework centers to be located in churches and community agency facilities. Here students will have a place to receive academic assistance and guidance in a supportive, encouraging environment. State funds, in the amount of $5 million, have also been devoted to the program.

A national program called the Career Beginnings Program supported by the Commonwealth Fund provides $1 million matching grants to colleges in selected cities who will establish for high school juniors special tutoring and guidance programs.

A similar program has been initiated in Virginia. The Fairfax County Schools, Virginia Polytechnic Institute and State University (VPI), and a private business foundation have formed the Alliance for Minority Success. Through this alliance 30 promising black secondary school students from Fairfax County are virtually guaranteed admission to VPI with a generous financial aid package if they successfully complete a required college preparatory program.

Efforts such as these--tutoring, enhanced instruction, mentoring support systems--address the motivational, practical and educational disadvantages of many black

students. Increasing efforts along these lines offers the best hope of reversing the downward trend in the participation of black students in higher education.

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THE CHICAGO STUDY OF ACCESS AND CHOICE IN HIGHER EDUCATION
A Report to The Illinois Senate Committee on Higher Education

by
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September 1984

EXECUTIVE SUMMARY

This report to the State Senate Committee on Higher Education assesses the extent to which students in metropolitan Chicago have real access to higher education. It shows that there are extreme differences in levels of college education between Chicago and the suburbs and among community areas within Chicago. There is a strong relationship between race and income and the rate of college graduation. Both blacks and Hispanics rank below whites in all parts of the metropolitan area. Chicago's record compares very unfavorably with that of the nation's other largest urban areas in terms of education for Latinos. Within the city of Chicago the communities with the lowest college education levels are low-income black areas on the South Side, where the proportion of college graduates can be as little as a fiftieth that of the better educated city and suburban communities.

Patterns of enrollment show that students attend very different kinds of institutions depending on their part of the metropolitan area and their race. Minority students in the metropolitan area are very strongly dependent on the community colleges within the city, particularly the minority City College campuses while white students are much more likely to enroll in four-year institutions. The city's community colleges are the only part of the higher education system in Illinois that has been rapidly declining in enrollment. Chicago State University, the only predominantly black four-year institution in the state, has more black students than any other four-year institution. Declining access is apparent at the most highly rated public institution in the metropolitan area, the University of Illinois, Chicago where black enrollment fell 38% from 1979 to 1983.

Both Latinos and blacks have a substantially higher college dropout rate than whites and the rate of degree completion for all groups is very low at community colleges. Both the number and the percent of black students receiving B.A., M.A., and Ph.D. degrees declined from 1975 to 1980. This was true both in Chicago and in the suburbs. The number of Latinos receiving degrees increased but the proportion of this very rapidly growing population finishing college was still far below that of blacks. Colleges showed sharply different attrition rates for minority students. For black students, only Roosevelt University had both a substantial black enrollment and a high completion rate.

The second part of the report is devoted to examining the evidence on many causes of the unequal college access and completion so apparent in the enrollment and graduation statistics. Its chapters on high school background show an extreme stratification of secondary education by race and income level and different educational programs and resources in different kinds of high schools. City high schools have fewer teachers per 1000 students, fewer counselors, fewer teachers in key pre-collegiate areas, and have had a decline in resources in recent years. The city schools have far more teachers who graduated from the area's least selective colleges and far fewer from the most demanding schools. City high school teachers are much less likely to have advanced degrees. Chicago has been able to hire very few new high school teachers in recent years because of its continual financial crisis. Within the city there are a number of high schools that do not offer a basic pre-collegiate curriculum and others that offer a wide range of academic courses. Those

offering the least tend to serve student bodies that are virtually all-minority and all-poor.

All suburban schools supplying data had average achievement test scores at the national norm or higher, while the great majority of city high schools were far below, some with average achievement levels below the fifteenth percentile. The high school dropout rate in Chicago was 48%. It was much higher in low income all-minority schools. All parts of the suburban ring had much higher graduation rates. The Senior Survey conducted by the Chicago Public Schools showed that the students who did reach their senior year believed that they had received good educations and were planning to enroll in four-year colleges. In fact, however, they had often missed essential pre-collegiate training.

A survey of Illinois students showed that the high dropout rate in high schools is a key reason for the underrepresentation of blacks and Latinos in college. Those minority students who finish high school are as likely as whites to begin some college. Minority students rely more than whites on teachers and counselors and college and military recruiters in making up their minds about college, perhaps because many fewer have parents who are college graduates. Students who enroll in four-year rather than community colleges are vastly more likely to remain in college two years after high school. Hispanics have much less information about colleges and financial aid than whites and blacks. Lack of money is an important reason why students drop out of college.

Where students go to college in Chicago is strongly related to where they live. There is a particularly strong pattern of channeling from black neighborhoods to Chicago City Colleges. Each of the community colleges draws its students from a defined geographic area. Black students are segregated in colleges which draw almost all of their students from a handful of all-black Chicago neighborhoods. National statistics show that the community colleges in Illinois are the nation's most segregated. The fundamental educational problem is that minority students in the Chicago area are strongly channeled into community colleges that have weak retention and transfer records.

The city community colleges serve the students with the most serious educational needs in the metropolitan area and are the key institutions for minority students' access to B.A. training. They, do however, provide less information to potential students, offer less of their advertised curriculum, spend less per student, transfer fewer of their students, and transfer students to less selective four-year colleges than their suburban counterparts. An out-of-district tuition system, which can raise the cost of attending a community college by 200% or more in metropolitan Chicago, is one of the institutional barriers that maintain segregation and inequality in the higher education system.

The level of financial aid available per student in Illinois has declined drastically in constant value dollars since the early 1970's and tuition levels in state universities, particularly the University of Illinois, have been soaring. The existing state financial aid system rations funds in ways that hurt low-income and minority students, particularly those attending community colleges. The policies assume an unrealistic level of student and family financial contribution, particularly in inner city neighborhoods where jobs for teenagers are virtually nonexistent. The program provides far more aid to the average student attending a private as opposed to a public college, though the

private school student's family income is normally higher. It makes it impossible for students who do not know until late in the academic year whether they will be able to enroll to obtain aid and it works against those who can only study on a part-time basis.

Our research shows the flow of students across the metropolitan Chicago area through 229 high schools into and out of almost 60 colleges and universities. It describes this overall system of educational mobility and educational failure in the Chicago area and reports on what happens to black, white and Latino students from the city and suburbs. It cannot, of course, analyze the inner workings of individual colleges and schools and we could not directly measure the quality of instruction in the thousands of classrooms. The statistics reported here raise large questions about educational opportunity in Chicago society. They also raise very important questions that should be examined in much greater depth within the individual campuses and schools. Studies are needed within each campus.

The study shows an interlocking system of educational stratification that treats minority and low-income students differently in a great many ways. The higher education system does not operate to equalize opportunity but has powerful institutional features that tend to perpetuate separation and inequality. There are no signs that these problems are curing themselves. In fact, cuts in scholarships, increases in tuition, increases in high school graduation standards and college admissions requirements, and cuts in compensatory programs in both high schools and colleges could lead to greater inequality and less access for a large and growing fraction of metropolitan Chicago students. The final chapter presents a variety of recommendations for increasing access and choice to higher education in the Chicago area.

FINANCIAL AID PACKAGING AND RETENTION OF MINORITY STUDENTS AT A LARGE, PUBLIC, URBAN UNIVERSITY

by

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ABSTRACT

This paper describes the first year results of a study to determine whether minority students receive financial aid packaging similar to non-minorities at a large, public, urban university. The purposes of the study are: 1) to determine the impact of computerized packaging systems on minorities, and 2) to determine the influence of packaging on student retention, good standing, and satisfactory progress. As such, this study is part of a larger, six-year longitudinal project focusing on changes in packaging as students advance toward graduation.

The study population includes 4,459 full-time financial aid recipients in 1983-84, who are citizens and never attended another university. The students were grouped according to ethnicity and whether they were first-time freshmen or continuting students. The study found that minorities participate in more aid programs, receive higher levels of gift aid (Pell grants, campus-based grants, and scholarships and waivers) and have lower loans than non-minority students. Further, the packages of freshmen and upperclass minority students did not differ significantly (.01 level). However, the retention, good standing, and satisfactory progress rates of minority freshmen were much lower than other students, even though all groups had similar high school rank status. The study concludes that the computerized system observed is effective in bringing financial aid programs to the assistance of minority students. The findings with respect to retention and continued eligibility for financial aid underscores the need for research on this critical issue.

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FINANCIAL AID PACKAGING AND RETENTION OF MINORITY STUDENTS AT A LARGE, PUBLIC, URBAN UNIVERSITY

Introduction

This paper reports the first year results of a six-year longitudinal study investigating financial aid packaging for minority students at a large, public, urban university. The study's focus is on the types of aid received by first-time, minority freshmen compared to their non-minority cohorts, as well as their minority and non-minority upperclassmen. First year academic performance and retention rates are also reported for the study groups and tests of statistical significance on the packaging measures.

The purpose of the study is two fold. First, studies concerning financial aid for minorities tend to indicate they do not participate as fully as their non-minority cohorts, even though they tend to have higher levels of need. Most of these studies are based on data from the 1970s, and in some cases the 1960s. At that time, sophisticated computer systems supporting the packaging process did not exist.

This is no longer the situation today. Many universities have purchased or developed on-line computer systems for packaging financial aid. However, the impact of these systems on packaging for minorities is unknown. One of the purposes of this study is to determine how these systems impact packaging. To accomplish this objective, financial aid data from an institution with one of these systems was analyzed to ascertain its impact on packaging.

The second and more difficult purpose is to investigate the relationship of financial aid packaging on minority retention, good

standing and satisfactory progress - all goals associated with financial aid programs. Since this study is limited to one institution, the findings are also of limited value. But longitudinal studies of financial aid are lacking in the literature, and this study will begin to fill that void. The retention and performance data reported here is only for one year of the study. The findings are somewhat tentative, but they suggest that future research on these topics could be highly useful to the field.

Student Financial Aid

Student financial aid is a major factor influencing institutions of higher learning. Forty-seven percent of all full-time undergraduate students received some form of public financial assistance in 1984 (Andersen, 1986). The growth of student aid in the last twenty years is dramatic. Gillespie and Carlson (1983) report that financial aid for various federal and state programs increased in current dollars (1983) from $.5 billion in 1963 to $16.1 billion. However, Fenske and Huff (1983) see the development of student aid as a "patchwork" of changing national concerns without a theoretical base. These programs find their beginnings in events such as the Soviet Union's launching of Sputnik and President Lyndon Johnson's War on Poverty, as well as in Congressional efforts to provide the general populace with more access to and choice in higher education.

Linking Minority Advocacy and Student Financial Aid

While student aid programs may be without a theoretical base,

many believe their major goal is to address higher education's past failures in serving minorities. Leslie states, "Perhaps as much as or more than equity by family income, considerations of racial equity were the driving forces behind the student aid programs of the later 1960s and early 1970s" (1977, p. 29).

The link between financial aid programs and concerns over equity is clear. The system of delivery provided by the primary student aid statutes (Title IV of The Higher Education Act of 1965, with the 1972, 1976 and 1980 Amendments) is based on need. One of the major changes in student aid over the past twenty years is the shift from merit to need in determining eligibility for participation. Since the median income of blacks and Hispanics is two-thirds that of non-minority households (Ramist and Arbeiter, 1984), a major goal of a need-based delivery system must be to make these programs available to minority students.

Expected Outcomes of Student Financial Aid

It is posited then that the goals of student aid programs are to bring access and choice to needy (mostly minority) students, as well as to increase their retention rates. If not, what could justify such large, expensive government programs? While these goals are not explicitly stated in the programs themselves, they are implied.

At the institutional level, a primary objective of financial aid programs is to remove barriers to retention among needy students. However, success is dependent also on student maintenance of satisfactory progress and good standing, and the degree to which

the institution's needy minority students receive aid.

Students receiving Title IV financial aid are required to successfully complete a certain number of hours at their institution. For example, at the study institution, if a student registers for 12 or more hours (full-time), 12 hours must be completed at the end of the semester for the student to maintain satisfactory progress. It is permissible to use summer term to meet this goal, but if the standard is not met by the subsequent year, the student is not eligible for continued financial aid. Satisfactory progress is ascertained at the end of each financial aid cycle (August of each year).

Federal regulations also require that students receiving financial aid maintain good academic standing. However, institutions are free to establish their own academic standards. At the study site, these standards vary depending on how many credit hours the student has completed. In 1983-84 and 1984-85, standards were as follows: (a) 24 or less credit hours -- cumulative GPA of 1.60 or higher; (b) 25-55 hours credit -- cumulative GPA of 1.75; and (c) 56 hours or more -- cumulative GPA of 2.00.

Minorities and Student Aid Packaging

Recent research (Olivas, 1981 & 1985) indicates that the composition of financial aid packages for Hispanic students differs from that of majority students. Olivas found that three-quarters of the Hispanic students in his study received only one form of aid. If minority financial aid recipients are receiving packages that differ from those of majority groups, then it is important to

determine the relationship between package composition and satisfactory progress, good standing, and retention. To this end, four primary research questions are asked:

1. Are minority students receiving financial aid packages which differ from those of majority students?

2. Does the composition of minority and majority financial aid packages change as students advance toward upperclass status?

3. What are the relationships between package composition and satisfactory progress, good academic standing, and retention?

4. Do these relationships differ between minority and majority students?

Packaging Financial Aid

Student aid programs are administered by postsecondary institutions on behalf of the sponsoring fund source. The role of the institution differs, however, according to the type of aid. These programs are differentiated based on whether the institution determines participants in the program. Programs which give institutions this control are referred to as campus-based programs and include Supplemental Educational Opportunity Grants (SEOGs), State Student Incentive Grants (SSIGs), National Direct Student Loans (NDSLs), and College-Work Study (CWS). Programs which do not are referred to as external programs; the student receives aid regardless of the institu ion attended. These programs include Pell Grants and Guaranteed Student Loans (GSLs).

The role and responsibility of the institution also differs depending on whether the aid is campus-based or external.

Campus-based programs give the institution a great deal of flexibility in allocating aid based on the institution's packaging policies. This type of aid also carries increased responsibility in terms of compliance with federal regulation and procedure. External aid only requires that the institution perform some record-keeping tasks and disburse monies to the student.

Mechanics of Packaging

Packaging financial assistance for students is no small task. Financial aid counselors are expected to counsel students, develop support packages tailored to their unique requirements, and ensure that institutional and agency regulations are followed. Given today's numerous sources of student aid and the complexities of federal regulation, financial aid counselors face a difficult task.

On the other hand, this complexity creates interesting opportunities for the institution. Basically, the institution is free to package campus-based awards in any equitable manner, provided the student is eligible for the award and the packaging policy does not discriminate on the basis of age, race, religion, or gender.

Packaging Research

There is little data concerning the influence of financial aid packaging on retention or on students in general. Much of the packaging research deals with the best methods of informing high school students about financial aid options. Other research concerns the best way to package aid (e.g., Brown, 1976). The remainder of the literature describes the packages awarded to students. For example, Smith (1977) reports that in 1974, 1975,

and 1976, sixty-eight percent of aided freshmen attending public institutions participated in only one program. Smith also found that the students receiving campus-based grants and loans had parents with higher median incomes than the parents of those receiving external aid (Pells and GSLs). This finding was also confirmed by Wagner and Tabler (1977). Further, Wagner, et al., reports that the lower the socioeconomic status, the higher the reliance on self-help. These trends were confirmed by the American Council on Education in 1979.

All of this research has limited value. First, the packages themselves are described in simplistic terms (e.g. the percentage of students receiving Pell grants). Indeed, many studies do not even report the dollar amount of the awards or the remaining unmet need, both extremely important variables. Secondly, the research does not consider the impact of the package on student behavior. With the exception of a few studies considering student aid as a factor in persistence (Tinto, 1982 & Voorhees, 1985), little has been written on this critical aspect. And finally, most package studies are based on student samples drawn without regard to the other packages received by non-sampled students, and in some cases, are combined with samples from other institutions. Since the packages awarded to various student groups may differ significantly, there is risk in this type of sampling. Further, the packaging policies of institutions do differ, and comparisons made between institutions are only valid to the extent that the policies are similar -- a significant limitation not discussed in the literature.

Methodology

The weaknesses of the methodologies utilized in the packaging literature stem from inadequacies of data more than from faulty design. Earlier researchers did not have the benefit of automated data systems from which to draw packaging data, reducing the task to a prohibitive manual extraction process. The strength of this study is that an automated student data base is available at the study site. Therefore, more comprehensive methods were utilized in studying the packages awarded to students, and their association with the financial aid goals of good standing, satisfactory progress, and retention.

Study Site

The study site is a large, public, urban institution in the Southwest. The institution offers a full range of academic programs at all education levels and contributes to the field of higher education in terms of continuing faculty research. The population and the economy of the surrounding community are growing rapidly. Eighteen percent of the community's population are minorities, as are approximately ten percent of the student body (Asian/Pacific Islander, Black, Hispanic, or Native American).

The computer system at the study site is a sophisticated on-line system supporting all processing phases. Financial aid counselors can track the status of a student's application on-line and enter updates to the student's file. Packaging is accomplished periodically based on an algorithm in the system which packages all completed files. This system was fully operational for the 1983-84

academic year. Since then, approximately 25,000 applications for aid have been processed each year, creating a rich data base for studying financial aid packaging.

Data Collection Procedures

We extracted information from the financial aid master record, as well as from the student master, to build a source file for analysis. From this file we collected the following data characterizing the student's financial aid package:

1. Total Family Contribution
2. Student Budget
3. Need (Student Budget minus Total Family Contribution)
4. Pell Grants
5. Campus-based Grants (SEOG and SSIG)
6. Loans (GSLs and NDSLs)
7. Work (CWS)
8. Scholarships and Fee Waivers
9. Unmet Need (Need minus Total Awards)
10. Earliest Package Date

Financial aid payments were grouped into five fundamental categories based on the type of aid. Grants are considered forms of gift aid, but were differentiated depending on whether the grant is externally awarded (e.g., Pell) or awarded by the institution (e.g., SEOG and SSIG). Both GSLs and NDSLs were grouped as loans because of similarity, even though the institution has more control over who receives an NDSL. Scholarships and tuition waivers represent different forms of aid, but could not be separated because of

co-mingling in the financial aid system at the study site. Scholarships and some tuition waivers are awarded for reasons other than need. However, the study site also has a program granting tuition waivers to needy students.

We also included demographic information, such as ethnicity and residency status, and academic information, such as class level, registered hours, completed hours, and cumulative grade point average (CGPA).

Financial Aid Packaging Measures

Using this information, we computed a series of measures to facilitate data analysis. We used the number of financial aid programs the student participated in (called participation) as a measure of the student's involvement in the financial aid system. We used the ratio of a specific award to the total awards (called Pell Import, Campus Grant Import, etc.) to determine the student's reliance on a particular form of financial aid. We calculated the ratio of unmet need to initial need (called Unmet Need Ratio) to ascertain the effectiveness of the system in packaging aid for the student. We used the earliest package date as an indicator of how early in the financial aid year the student received packaging (this measure was expressed as the number of days from January 1st). We checked the student's CGPA to determine if the student was in good standing at the end of the year, and we checked credit hours completed for evidence of satisfactory academic progress. Finally, we computed the ratio between hours registered and hours completed (called Efficiency) to determine the student's efficiency in convert-

ing registered hours into advancement toward upperclassman status.

Study Design

We grouped financial aid recipients according to minority status and whether the student was new or continuing. We hypothesized that continuing students are more aware of how the system works, and therefore, receive different packaging. The minority group consisted of blacks, Hispanics, and native Americans. For purposes of this study, we included Asian and Pacific islanders in the majority group, since their academic performance and retention levels were closer to (indeed even higher than) the performance and retention of the non-minority students. This design, then, resulted in four groups for analysis: 1) new minorities; 2) new non-minorities; 3) continuing minorities; and 4) continuing non-minorities.

The study population only included full-time undergraduate financial aid recipients in fall 1983, who were citizens with levels of need not met by their family's contribution. We further limited the population to include students "native" to the institution (students with less than 12 hours transfer credit). Therefore, the "new" students in the minority and non-minority groups were actually first-time freshmen, having their first experience with the financial aid delivery system. Continuing students could be from any class level (freshmen through senior), but attended the institution the preceding fall or spri ; semesters.

This resulted in a study population of 4,459 students who were homogeneous in terms of their experience, or lack thereof, with the institution. Table 1 presents the characteristics of this

population in more detail.

Using our measures of packaging we performed a two-by-two analysis of variance (ANOVA). This was done for the 1983-84 financial aid year. The F ratios for the groups and their interactions were computed at the .05 and .01 level. Then, we performed Tukey-Kramer's Honestly Significant Difference (HSD) test to look for significance in the differences in the cell means.

Findings

The findings for this study are reported on tables 1-9. Table 1 reports the characteristics of the study population in terms of demographics and academic variables. The 4,459 students in the study were about 50 percent female, and 21 percent non-resident. While this closely resembles the distribution of these two characteristics in the overall student body, the representation of black, Hispanic, and native American students was almost double their normal representation (8 percent student body vs. 15 percent study population).

Further, the new students (first-time freshmen) in both study groups (minority and non-minority) had higher concentrations of non-resident students than in the continuing groups. This is reflected in higher average family contributions for these students, as would be expected. However, in the case of new non-minority students, this is not reflected in higher student budgets when compared to the other groups (table 2). Since non-resident students pay three and a half times more to attend the institution, we are not sure why this is the case.

The average earned hours at the end of 1983-84 is consistent with what was expected, and the average high school rank variable indicates the students were basically all in the upper fifth of their high school class. However, the mean CGPA of the new minority students was much lower than the other groups, even lower than their non-minority freshmen cohorts. This is reflected in a lower retention rate (62 percent) for this group on table 4. It is interesting to note, that the mean CGPA of both minority groups is lower than the non-minority groups, even though they all have comparable rank levels in their high school class.

Study Design

The findings of the ANOVA strongly support the group dichotomy selected for the anlaysis (table 5). Ethnicity and new/continuing have clear separate effects on all but one of the variables (campus-based grants was not significant for new/continuing). Perhaps the most interesting finding was that unmet need was not significant for any of the groups. By refering to table 2, which reports the cell means for the financial aid variables, it is clear that the packaging process brings all student groups to a similar level of unmet need.

All of the interaction effects were not significant except for work (college work study), and this interaction was only significant at the .05 level. By referin_ to table 2, this can be seen in the data. Only continuing minority students are markedly different from the other groups in their reliance on work.

Do Minority Students Receive Different Packaging?

At the study site, the minority students did receive different packaging in 1983-84. By refering to tables 2 and 3, it is clear that minorities are receiving higher levels of gift aid (pell grants, campus-based grants, and scholarships and waivers) and lower loans. Minorities also received more aid dollars than non-minorities. Further, on the average they received more than two types of awards, whereas non-minorities received less than two. This finding is opposite of that in the literature (e.g., Olivas, 1983).

The statistical significance in the mean differences between new and continuing minorities and their non-minority cohorts are reported on tables 6 and 7. For new minorities, all mean differences with the non-minority groups are significant (.01 level), except for work (new minority and all non-minority students are not receiving work awards).

For continuing minorities, the same trend holds, except for work and loans. Continuing minorities tend to work more than non-minority students, but do not have significantly lower loans than the non-minority, first-time freshmen.

Does Package Composition Change as Students Advance?

The question of whether the composition of the package changes as students advance toward upperclassman status can not be fully answered by this data. This question involves a longitudinal comparison, which we have not yet completed. However, it is possible to draw some conclusions by comparing the packages received by continuing students to those of new students in 1983-84.

As a group, new students are packaged earlier than continuing

students (table 3). The mean earliest package date for first-time freshmen (both ethnic groups) was 173 days. While the continuing minorities were packaged on the 183rd day and continuing non-minorites on the 198th. However, beyond this, the ethnic differences are so strong, that all other comparisons must be made relative to the student's ethnicity.

For minorities, there is no significant difference, except for work, in the packages awarded to new and continuing students (tables 6 and 7). However, the same is not the case for non-minorities. All of the packaging variables are significantly different, except for campus-based grants, between new and continuing non-minority students (tables 8 and 9).

What Are the Relationships Between Package Composition and Retention, Good Standing and Satisfactory Progress?

Again, this analysis only provides some indication of what the relationships are and it is clear that other variables are working to influences these outcomes. However, the magnitude of the difference underscores the need for more research into these effects.

As noted earlier, new minorities perform academically lower than the other groups, even though they are comparable in terms of high school rank and receive more favorable packaging (tables 1 & 2). This is apparent in the statistics reported on table 4. New minorities are persisting at low r rates (62 percent compared to about 75 percent for the other groups) and more often leave the university in academic difficulty (34 percent compared to 18 percent for new non-minorities). And twenty percent of those who do persist

into the second year are below good standing and seven percent did not make satisfactory progress.

Do These Relationships Differ for Minorities and Non-minorities?

The only test for significance performed on the information in table 4 was on the efficiency ratio (hours completed/hours registered). As discussed earlier, this ratio is an indication of the effectiveness of the student in converting registered hours into advancement toward upperclassman status. The efficiency ratio is lowest for the minorities as a group, and within minorities, lowest for new minorities. These differences were statistically significant (tables 6 and 9).

Conclusions

We believe our findings are important for higher education. First, the findings indicate the value of this type of research, and underscore the need to continue thoughout the proposed six years. Second, the impact of the computerized financial aid system at the study site is in the right direction. Pre-system packaging data is not available, but it is clear that packaging for minorities at the study site is different from packaging reported in the literature. Minorities are receiving more awards, with higher levels of gift aid and lower loans. Further, minorities are participating at higher rates -- double their concentration in the general student population. And finally, minority packaging for upperclassmen did not v ry significantly from packaging for first-time, minority freshmen. This was not the case for non-minority freshmen. All of this speaks well for the effectiveness of the computerized financial aid system at

the study site.

The performance of minorities in terms of retention, satisfactory progress and good standing is a major concern. New minorities are doing poorly, even though they have the most favorable packaging. Since they do not differ from the other students in terms of high school rank, we can only infer that the quality of their secondary education was less than the education received by non-minority students.

Of particular concern were the numbers of new minorities not maintaining satisfactory progress and good standing, because these students will not be eligible for continued aid. Also, the efficiency in converting registered hours to completed hours indicates these students will require more than four years to graduate. In terms of eligibility for financial aid for these students, this is a problem because many of the aid programs are not structured to run for five or six years.

Table 1
Demographic and Academic Summary of Study Population

	Minority		Non-Minority		
	New	Continuing	New	Continuing	Total
Total Students	240 5.4%	437 9.8%	1,176 26.4%	2,606 58.4%	4,459 100%
Female	126 5.6%	236 10.4%	622 27.5%	1,281 56.5%	2,265 100%
Out-of State	56 6.0%	75 8.0%	319 34.0%	488 52.0%	938 100%
Average Total Earned Hours	22.4	77.3	25.7	87.0	66.4
Average CGPA	1.93	2.41	2.51	2.87	2.68
Average High School Rank	21.2	21.5	19.5	20.4	20.3

Note: The study population is based on native, full-time undergraduate students who are citizens; therefore, "New" refers to first-time freshmen. The average total earned hours and CGPA were computed at the end of the academic year.

Table 2
Average Awards, Budget, Need and Family Contribution
for the Study Population, 1983-84

	Minority		Non-Minority		
	New	Continuing	New	Continuing	Total
Total Family Contribution	$967	$894	$975	$725	$821
Student Budget	$5,489	$5,853	$4,743	$4,869	$4,965
Need	$4,523	$4,959	$3,769	$4,143	$4,145
Pell Grants	$695	$727	$337	$417	$441
Campus-Based Grants	$621	$529	$172	$177	$234
Loans	$829	$1,076	$1,151	$1,312	$1,221
Work	$183	$457	$119	$218	$214
Scholarships and Waivers	$866	$709	$654	$536	$602
Total Awards	$3,193	$3,499	$2,434	$2,660	$2,711
Unmet Need	$1,329	$1,460	$1,334	$1,483	$1,433

Note: The study population is based on native, full-time undergraduate students who are citizens; therefore, "New" refers to first-time freshmen. "Campus-Based Grants" include SEOGs and SSIGs.

Table 3
Summary of Mean Financial Aid Packaging Measures, 1983-84

	Minority		Non-Minority		
	New	Continuing	New	Continuing	Total
Unmet Need Ratio	0.27	0.27	0.27	0.26	0.26
Participation	2.1	2.3	1.6	1.7	1.7
Earliest Package Day	173	183	173	189	183
Pell Import	0.21	0.23	0.13	0.15	0.16
Campus Grant Import	0.15	0.11	0.05	0.04	0.06
Loan Import	0.23	0.30	0.36	0.43	0.39
Work Import	0.04	0.09	0.03	0.05	0.05
Scholarship and Waiver Import	0.37	0.27	0.43	0.33	0.35

Note: The study population is based on native, full-time undergraduate students who are citizens; therefore, "New" refers to first-time freshmen. All measures are based on mean values, except for the Unmet Need Ratio which is based on the median.

Table 4
Summary of Persistence, Good Standing, Satisfactory Progress and Efficiency Measures, 1983-84

	Minority		Non-Minority		
	New	Continuing	New	Continuing	Total
Persisters	0.62	0.77	0.75	0.74	0.73
Voluntary Stopouts	0.04	0.17	0.07	0.24	0.18
Academic Stopouts	0.34	0.06	0.18	0.02	0.09
Good Standing	0.53	0.92	0.72	0.97	0.87
Satisfactory Progress	0.58	0.74	0.74	0.85	0.79
Efficiency	0.74	0.81	0.84	0.88	0.85

Note: The study population is based on native, full-time undergraduate students who are citizens; therefore, "New" refers to first-time freshmen. Voluntary stopouts are students who did not attend in the subsequent year, but were in good academic standing.

Table 5
F Ratios on Variables for Separate Cell and Interaction Effects, 1983-84

	Degrees of Freedom	Ethnicity	New/ Continuing	Interaction
Need	1	43.48**	11.59**	0.07
Pell Grants	1	169.05**	4.80*	0.85
Campus-Based Grants	1	246.91**	2.92	3.54
Loans	1	23.37**	12.43**	0.55
Work	1	26.66**	40.25**	8.92*
Scholarships & Waivers	1	20.47**	10.47**	0.21
Total Payments	1	102.85**	11.39**	0.25
Unmet Need	1	0.02	2.13	0.01
Efficiency	1	75.19**	28.54**	1.19

*Denotes significance at the .05 level.
**Denotes significance at the .01 level.

Table 6
Mean Differences Between New Minorties
and Other Groups, 1983-84

	Minority Continuing	Non-Minority New	Non-Minority Continuing
Need	-436	754**	379
Pell Grants	-33	358**	278**
Campus-Based Grants	91	448**	444**
Loans	-247	-323**	-483**
Work	-274**	64	-35
Scholarships & Waivers	157	212*	329**
Total Payments	-305	759**	533**
Unmet Need	-131	-5	-153
Efficiency	-0.06**	-0.09**	0.14**

*Denotes significance at the .05 level.
**Denotes significance at the .01 level.

Table 7
Mean Differences Between Continuing Minorities and Other Groups, 1983-84

	Minority New	Non-Minority New	Non-Minority Continuing
Need	436	1190**	815**
Pell Grants	33	390**	310**
Campus-Based Grants	-91	357**	352**
Loans	247	-76	-236**
Work	274**	338**	239**
Scholarships & Waivers	-157	55	172**
Total Payments	305	1064**	838**
Unmet Need	131	125	-23
Efficiency	0.06**	-0.03*	-0.07**

*Denotes significance at the .05 level.
**Denotes significance at the .01 level.

Table 8
Mean Differences Between New Non-Minorities
and Other Groups, 1983-84

	Non-Minority Continuing	Minority Continuing	Minority New
Need	-374**	-1190**	-754**
Pell Grants	-80**	-390**	-358**
Campus-Based Grants	-4	-357**	-448**
Loans	-161**	76	323**
Work	-99**	-338**	-64
Scholarships & Waivers	118**	-55	-212*
Total Payments	-226**	-1064**	-759**
Unmet Need	-148	-125	5
Efficiency	-0.04**	0.03*	0.09**

*Denotes significance at the .05 level.
**Denotes significance at the .01 level.

Table 9
Mean Differences Between Continuing Non-Minorities and Other Groups, 1983-84

	Non-Minority New	Minority Continuing	Minority New
Need	374**	-815**	-379
Pell Grants	80**	-310**	-278**
Campus-Based Grants	4	-352**	-444**
Loans	161**	236**	483**
Work	99**	-239**	35
Scholarships & Waivers	-118**	-172**	-329**
Total Payments	226**	-838**	-533**
Unmet Need	148	23	153
Efficiency	0.04**	0.07**	0.14**

*Denotes significance at the .05 level.
**Denotes significance at the .01 level.

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[CORRECTED: 6/10/86]

INTERNATIONAL PERSPECTIVES ON STUDENT FINANCIAL AID

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on Student Financial Aid

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Introduction: Sharing the Costs of College

Higher education is a costly enterprise in any society. A basic premise of this paper, as of the larger study on which it is based, is that these costs--again, in any society--are borne by four parties: taxpayers, parents, students, and philanthropists.

1. The taxpayer, through taxes on income, consumption, assets, sales, or manufacturing, and including any indirect "tax" of inflation brought on by public deficit financing;

2. The parents, through direct cash contributions, either to the institution (i.e., tuition) or to the student, or through indirect or in-kind contributions of room, board, laundry, and the like to cover the costs of student living;

3. The student, through depletion of savings, through term-time or holiday work, or through loans; or

4. The philanthropist, whether individual, corporate or institutional, through voluntary donations that reduce the expenses that might otherwise have to be borne by one or more of the aforementioned parties. (Some would have business a fifth and distinct partner. I prefer, however, to view business's share, if there be one, either as voluntary and borne by the owners, in which case it can be included within the category "philanthropist," or as involuntary and borne by the general consumer, in which case its incidence is more like that of a sales or consumption tax and can be viewed at least conceptually as quite indistinguishable from a burden borne by the general taxpayer.)

The material presented in this article is from D. Bruce Johnstone, Sharing the Costs of College: Student Financial Assistance in the U.S., U.K., Federal Republic of Germany, France, and Sweden. (New York: The College Board, publication forthcoming 1986).

The key feature of the cost-sharing paradigm is that it is essentially zero sum. That is, a relatively invariable sum of costs--for the support of institutions as well as for the support of student living--must be borne by these parties and no others, and any shift of burden from one party means an approximately equivalent shift to one or more of the others.

From such a cost-sharing paradigm, a number of public policy instruments may be viewed as devices to apportion higher education's costs among their potential bearers: for example, the presence or absence of tuitions and fees, parental "means testing" or "need analysis" by which grants or subsidies may be awarded or reduced, student loan opportunities and expectations, subsidies (or the absence of subsidies) for student living expenses, and so forth.

The apportioning of costs and any deliberate or inadvertent shift in this apportioning in turn raises public policy issues that are important in any society: How much financial sacrifice, if any, should be expected of parents of college and university students? At what age of the child or at what level of his or her studies does the parental obligation cease--and to whom does it then pass? If there is to be a parents' share, and if it is to vary directly with parental income, or with some combination of income and assets, at what (low) income does the expected parental contribution begin...how quickly, or how steeply, does the expected contribution rise with rising income...and at what income does the parental contribution reach its effective maximum? Should students bear a share of higher educational costs...how much of a share...and how shall it be borne? Are there practical or ideological limits to the burdens that students can bear either through term-time or holiday work or through loans? What are the public goals served by the taxpayer-borne share of costs, and what mix of public expenditures--e.g., full or partial institutional support, need-based or means-tested grants to students, subsidized room and board, or subsidized loans--most effectively meet these public goals?

Such questions are relatively simple to formulate, if enormously difficult to answer, or at least to answer unambiguously. The difficulty in part lies in an even deeper and more fundamental layer of questions, the answers to which are even more elusive, but which ultimately reflect on the proper sharing of costs among taxpayers, parents, students, and philanthropists. For example, what proportion of a particular age cohort should go on to what levels or what kinds of higher education, and how much taxpayer-borne expenditures, or subsidies, should be used to generate such targets? What is an appropriate living standard for university students, particularly when supported in whole or in part through public (taxpayer-borne) grants, and how much should this standard be raised (particularly at taxpayer expense) if a higher standard is required to yield a university population that reflects more nearly the socio-economic, ethnic, linguistic and geographic characteristics of the society as a whole?

A Comparative Study of Cost Sharing

I began playing in earnest with this paradigm in 1984 when I was part of the College Scholarship Service team looking at the old question, "who should pay" as part of the CSS's 30th Anniversary Colloquium. My background as a

student of student finance goes back to the early 1970's, when I directed the Ford Foundation studies of the income contingent loan concept. Since then, and depending on my available time, I have either toiled or puttered in the field of student financial assistance, policy analysis or research. Some of that toiling and a bit of the puttering has been in pursuit of what some other countries are doing. Given very similar underlying costs, the very same four parties to share in the burden of meeting these costs, and very similar public policy objectives, at least in such broad categories as equalizing higher educational opportunities and economizing on the use of public funds, it seemed that some useful perspectives could be gained by a comparative study of student financial assistance.

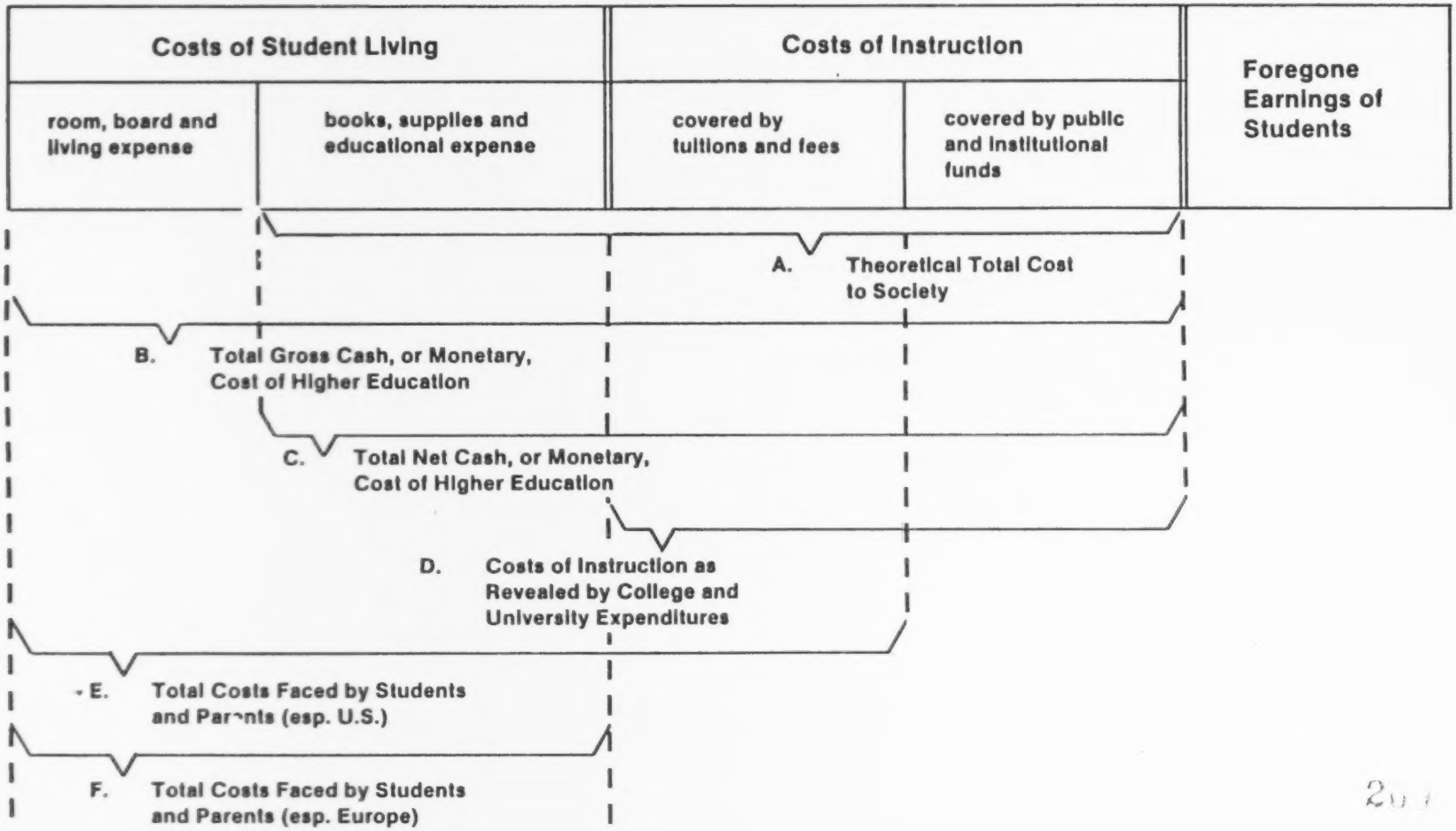
A three-month presidential study leave from the State University of New York, gained after six years of mainly good behavior, with both intellectual and financial support from The College Board, especially from Larry Gladieux and Janet Hansen of the Washington Office, made possible a six-week tour of the United Kingdom, France, Germany, and Sweden. I studied their higher educational systems generally, with special attention to the costs that faced the student and his or her family and how those costs were met. I was particularly interested in the expected parental contributions, their functional relationships to income and to other measures of either "means" or "need," as well as the explicit or implicit expected student contributions and the nature of the loan programs, if any, by which these contributions could be generally met. An important question asked of each loan program (i.e., in the U.S., Sweden, and Federal Republic of Germany) was the extent of the "real loan" versus the "implicit grant," or the present value of the subsidy stream. In each country, I looked for recent history, apparent trends, and the socio-political milieu in which the issues surrounding cost-sharing are being confronted.

The question most frequently put to me is: "which system is best?" In the interest of time and so as to prolong no longer the suspense generated by that question, let me summarize my 242-page manuscript--and answer as best I can that question--in one sentence (you must permit semi-colons):

- If you are a very good, traditional, full-time student, you would best be English;
- If you are a parent, Swedish;
- If a taxpayer, French;
- If a student borrower, German; and
- If a comparatively weak or part-time or non-traditional student, you would best be American.

* * * * *

Figure 1
The Costs of Higher Education:
The Range of Concepts


Costs of Student Living
Costs of Instruction
Foregone Earnings of Students
room, board and living expense
books, supplies and educational expense
covered by tuitions and fees
covered by public and institutional funds
A. Theoretical Total Cost to Society
B. Total Gross Cash, or Monetary, Cost of Higher Education
C. Total Net Cash, or Monetary, Cost of Higher Education
D. Costs of Instruction as Revealed by College and University Expenditures
E. Total Costs Faced by Students and Parents (esp. U.S.)
F. Total Costs Faced by Students and Parents (esp. Europe)

The Cost to the Student and Family

The first step in any comparative analysis is to specify that which is being observed and to compare apples, as nearly as possible, only with apples. Going with this metaphor, the cost of higher education is a real fruit basket. The range of concepts, as shown in Figure 1, includes foregone student earnings, the costs of instruction as revealed in institutional operating accounts, and what I call the "costs of student living," which in turn includes those costs of living such as room, board, entertainment, and clothing that are faced by anyone, student or not, and those specifically educational expenses such as books, supplies, travel, and the like that are incurred as a result of being a student.

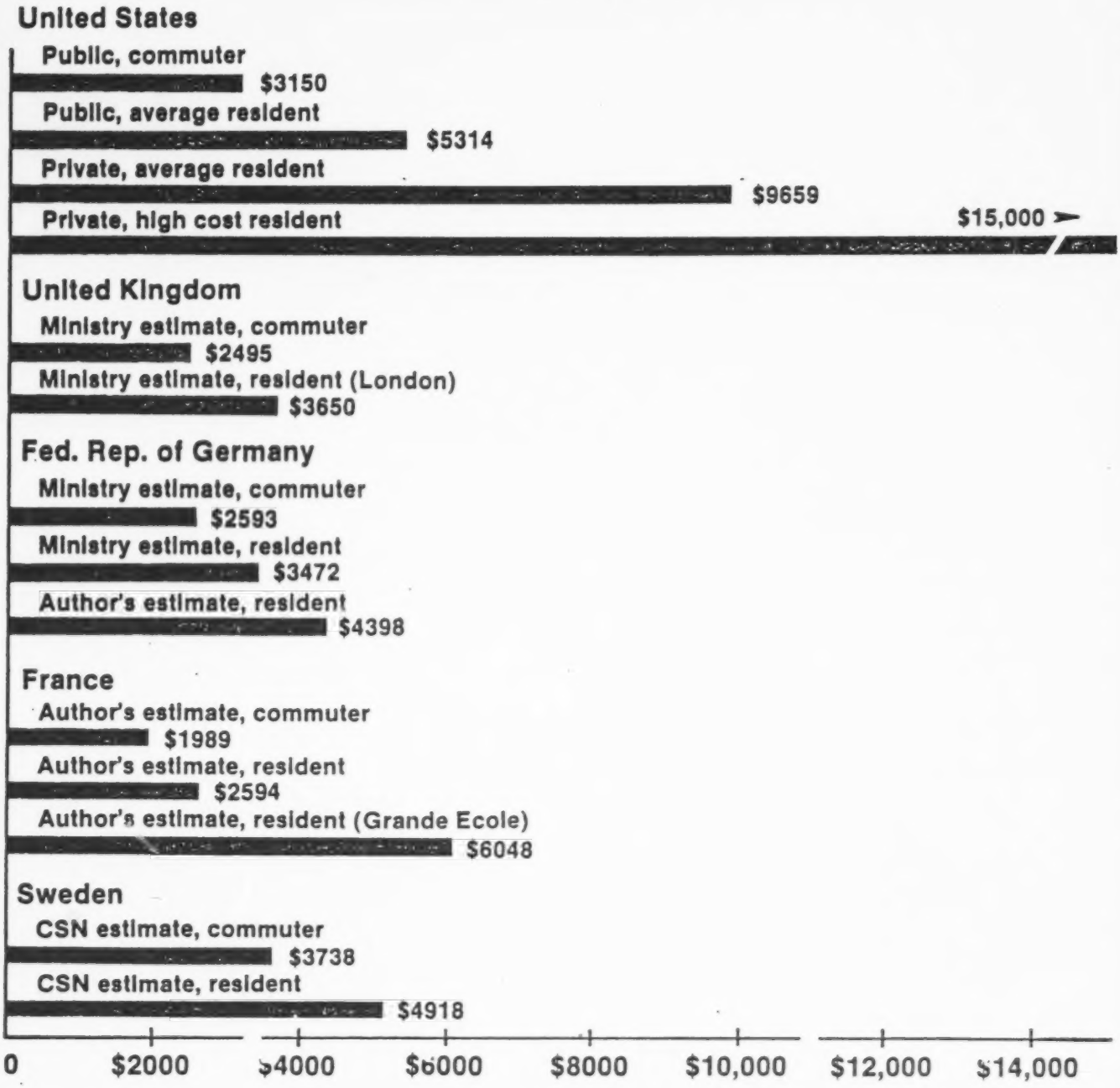
The great difference between the U.S. and most of Europe with regard to costs and student financial assistance is that the students in the U.K,, France, Germany, and Sweden pay almost no part of the costs of instruction--i.e., pay zero or minuscule tuitions and fees--whereas U.S. students pay a small but noticeable portion of these costs in the public sector, and a very large and truly attention-grabbing portion in the U.S. private, or independent, sector. Because my principal interest was in viewing the policies and policy instruments that fall within the concept of "financial assistance," I took as my unit of observation those costs faced by the student and his or her family.

In the U.K., the Federal Republic of Germany, France, and Sweden, this meant only the costs of student living (except for some tuition-paying Grandes Ecoles students in France). In the U.S., the costs faced by the student and family include, of course, the costs of student living, plus tuition and fees.

Figure 2 shows a variety of cost estimates for each of the five countries in the study. There is considerable variation both within each country and among the five countries. Within-country variation can be attributed to commuter-resident status, to the amount of tuition or fees paid (in the U.S. and to a limited degree in France), and to individual student living standards, which in turn are probably a function very largely of resources available to the student-family unit. Between-country variation can be attributed to the presence or absence of tuition, to the cost of living generally, to the extent of governmentally-subsidized room and board, and to the prevailing cultural sense of how well a student ought to live--in comparison, say, with his or her non-student age peers.

For example, discounting tuition, costs are highest among the five countries studied in Sweden--reflecting the high cost of living in that country generally, the absence of governmental-subsidization of living expenses, and a cultural view that would have a twenty-one year old student live at about the same standard as a twenty-one year old worker or clerk. The costs in Germany are also quite high, and would be higher were it not for some savings made possible by the governmentally-subsidized Studentenwerk, which provide low-cost meals and some low-cost housing. French costs are the lowest, due to lower living costs generally (compared to Sweden, U.S., or Germany), to the subsidized meals and housing available from the local Centre Régional des Oeuvres Universitaires et Scolaires, or CROUS, and finally to a tradition in which living either at home or in genteel academic poverty

Figure 2
Costs Faced by Students and their Families, U.S., U.K., Germany, France, and Sweden, Various estimates, 1985-86.



Source: D. Bruce Johnstone, Sharing the Costs of College, New York: The College Board (forthcoming).

continues to be a more accepted condition of student life--than, say, in England, West Germany, or Scandinavia. The U.K. estimates are low partly because of lower living standards generally in the U.K. and possibly because the only estimates available were either Ministry estimates, which may have some incentive to estimate low and to restrain the growth of grant expenditures, or actual survey results from the National Union of Students, which may also err on the downside as expenditure surveys often do. However, taking all factors into consideration, including inevitable errors in estimation, and controlling especially for commuter-resident status in each country and for the presence of tuition and fees in the U.S., the costs faced by students and families in the five countries portrayed in Figure 2 are remarkably similar.

The Five Systems: Summary Sketches

A single lecture or article is not the occasion for full explanations of the financial assistance of each of the five countries of the study. But allow me to sketch briefly just the essential features of each, keying on the shares of the costs that are faced by students and parents and that are borne by taxpayers, parents, students, and philanthropists. Because a substantial philanthropic share is a factor only (at least among my subject countries) in the U.S., and because the relative taxpayer share in most countries is the equalizing or balancing factor in the equation, a good anchor for our comparisons is the expected parental contribution as a function of family income shown in Figure 3.*

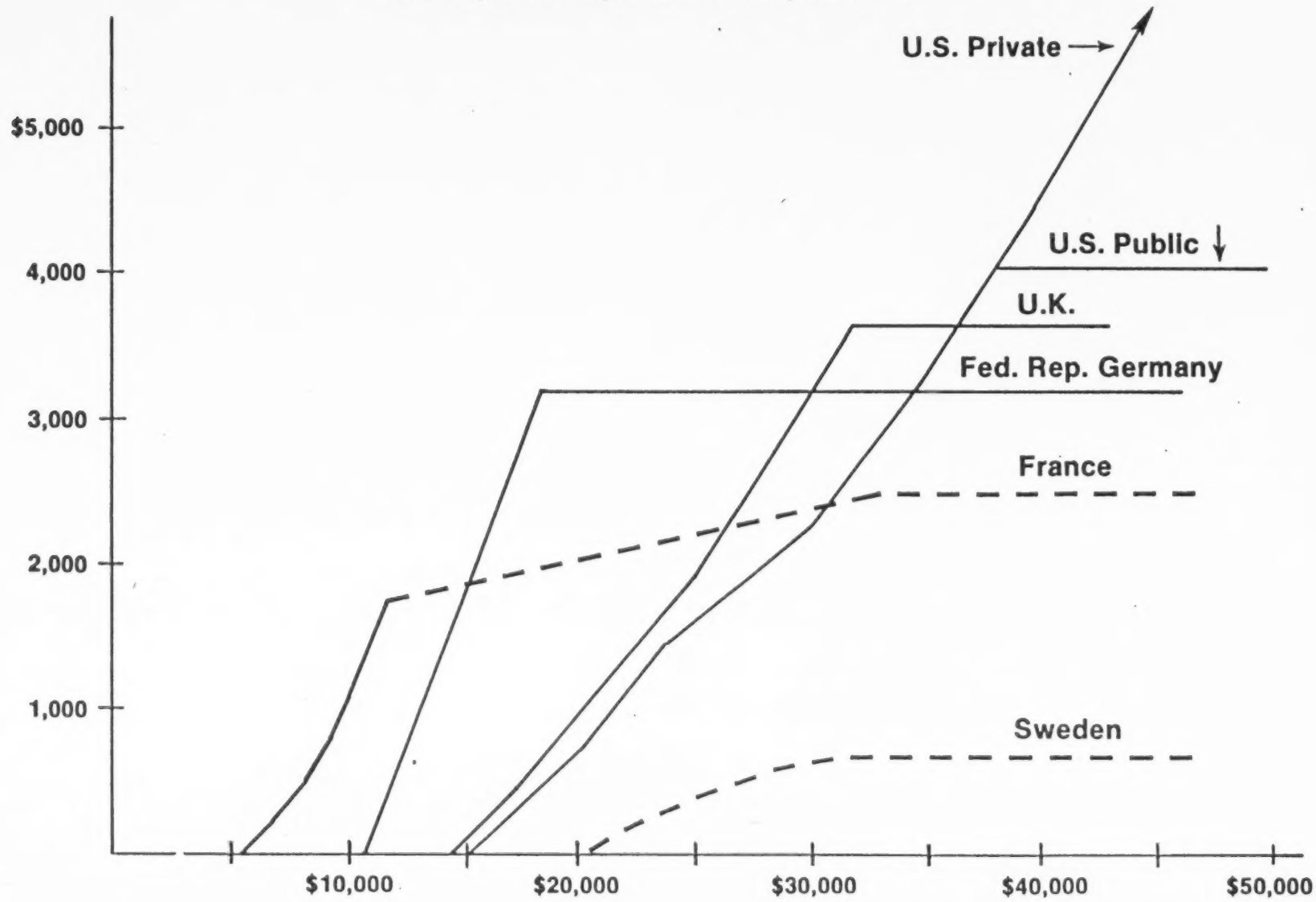
The U.S. The United States' system, such as it is, is built upon an expected parental contribution that begins at an annual income of about $15,000 and rises at a relatively gentle slope, as shown in Figure 3, with marginal "tax rates" in the range of 15-25 percent. What is astonishing to a European are the parental contributions of $12,000 to $15,000 and more per year for the higher education of children in the U.S. private sector.

At low levels of income, taxpayer assistance via means-tested grants are available to all enrolled students who are in good academic standing and maintaining satisfactory progress--which standards are quite generous compared to other countries, to the special benefit of students of modest academic aptitudes and to otherwise non-traditional students.

Student self-help is also expected in the form of term-time and summer earnings as well as loans. The self-help expectation is evidenced by the capping of federal need-based aid (the Pell Grant) at one-half of total cost

*All local currencies have been converted to U.S. dollars via a purchasing power parity index rather than via market exchange rates, which in 1985 greatly underestimated the true worth of most foreign currencies in their own countries. A purchasing power parity index, on the other hand, equates what the Deutschmark buys in Germany with what the dollar buys in the U.S., and is a much better way to compare, e.g., incomes, grants, prices, loan amounts, and the like among countries.

Figure 3
Higher Education Expenses Borne by Parents as a Function of Family Income, U.K., Germany, France, Sweden, and the U.S., 1985-86



even when the parental expectation is zero. The students' share may diminish at low-cost public colleges for children of affluent parents--yet even in these situations, the tradition in the U.S. of part-time work for college students is strong, even though student loans are less available for students with affluent parents than in the recent past. At private colleges, total costs are so high that even middle and upper-middle income families must rely on student self-help--term-time work and loans--often at levels of $2000 to $4000 a year and sometimes even higher.

United Kingdom (England and Wales). The U.K. has no truly independent sector to speak of, and the tuitions are automatically paid by the government on behalf of nearly all British resident students, so the costs faced by most students and their families are the costs of student living--in the neighborhood of $3000-4000 a year.

All eligible students--which means virtually all British resident students at the universities and polytechnics who are studying full-time for their first approved degree or diploma program--are entitled by law to mandatory grants, less any expected parental contributions.

The expected parental contribution in the U.K. is very similar to the expectation in the U.S., beginning as is shown in Figure 3 at about $15,000 and reaching the full amount of what would otherwise have been the mandatory grant ($3650 in London) at an annual "residual income" of about $32,000. At higher family incomes, the costs of student living are the parents' responsibility, although the tuitions continue to be paid automatically.

The most significant difference between cost sharing in the U.K. and in the U.S. is the virtual absence of any expected student share in the U.K. There is no generally-available student loan program, even as a supplement to the parental and, or, taxpayer contributions. Students are also discouraged from term-time work--in part by a "pound-for-pound" reduction of the mandatory grant by any amount earned during the term in excess of £425 ($717), but more so, particularly in the universities, by a tradition of full-time study undistracted by the need to work part-time--a tradition that may seem to us to be indulging of the students and hard on the taxpayer, but a tradition that the British claim to be efficient and even economical by virtue of the low rate of attrition and the supposedly shorter time required for completion of a degree or diploma.

Germany. There are no tuitions and only minuscule fees in the Federal Republic of Germany, so the costs faced by students and their parents are the costs of student living only. These costs are lowered somewhat through the provision of indirect public assistance in the form of subsidized meals, rooms, and some services through the local student service organization, or Studentenwerk.

Parents are required by law to support their children financially through higher education--to the level of education appropriate for first entry into an occupation, given the interests and academic ability of the child, and consistent, of course, with the financial means of the parents. The required

parental contribution is a certain percentage of all family income above a base, or "free," or "protected," amount, which base rises with additional dependent children. For a two-parent family with one student and one additional non-student dependent child, the base in 1985-86 is DM23,820 [$11,028]. Thirty-five percent of all income above the base is protected for the student and the family, as is an additional 10 percent for each additional non-student dependent. All other income above the full protected amount is considered available for support of the student. Thus, the effective marginal tax rate for the parental contribution in our four-member family example is 55 percent of all income in excess of about $11,000. At this rate, the required maximum parental contribution of DM7000-8000 ($3300-3700] is reached at an income of about DM42,557 [$19,702]. There are tax advantages in the form of prolonged child allowances and enhanced tax deductions that lessen the parental burden, and many parents fail to provide the full amount in anticipation of the student's finding a job. Nevertheless, the German parental contribution shown in Figure 3 is more rigorous than either the U.S. or the U.K. contribution at low levels of income, although the effective upper limit of approximately DM8500 [$3935] on costs to the student and family protects the middle and upper-middle income German parents from the enormous burdens experienced by U.S. parents with children at expensive independent colleges.

The costs of student living that are not met by the German parents are borne by the German student through part-time and summer work and through the repayable Bundesausbildungsförderungsgesetz, colloquially called "BAföG," and by the taxpayer, through the very high proportion of subsidy within the BAföG. In fact, with five years of grace between the end of studies and the first payment due, with as long as 20 years to repay, and with a zero rate of interest, plus principal forgiveness provisions for early completion of studies and for finishing in the top 30 percent in academic standing, the "true loan," at a conservative discount rate of only 10 percent, is less than 23 cents on the dollar for the average student and 10-15 cents on the dollar for those who finish early and with high academic standing.

The taxpayer contribution in Germany to the costs of student living is thus entirely indirect: tax advantages to parents, subsidies to the Studentenwerk, and subsidies to the BAföG. The student contribution looks considerable, particularly when compared to the period prior to 1984, when BAföG was primarily a grant program. Nevertheless, the easy repayment terms of the new repayable BAföG shift some of that burden, over time, back to the taxpayer.

France. The French universities and the university-affiliated institutes of technology (IUT's) are tuition-free, although some of the elite, semi-autonomous Grandes Ecoles do charge tuition. Meals, a limited number of rooms, and some non-academic services such as travel and entertainment are provided at subsidized prices through the regional student Service Center (Centre Régional des Oeuvres Universitaires at Scolaires, or CROUS). In addition, French students, more often than their American, British, German, or Swedish counterparts, tend to live at home and thus to rely more on their parents for room, board, and other non-cash kinds of support. The costs to students and parents in France tend thus to be generally low, but are also

extremely variable--ranging from as little as FF12,000-15,000 [$1613-2016] for a commuter, to FF19,000-20,000 [$2554-2688] for an average university student still taking some advantage of his or her CROUS, to FF45,000 [$6048] or more for the tuition-paying, independent-living student attending a Grande Ecole.

These costs are assumed to be the responsibility primarily of the parent, with a very small means-tested, or need-based grant (bourse d'enseignement supérieur sur critères sociaux) available to assist very low income families. The bourse is awarded on nine levels, or echelons, ranging in 1985-86 from a high of FF12,744 [$1713] to a low of FF3690 [$496], with small supplements for certain reasons and with an automatic boost to the next highest echelon for students who have completed military or other national service.

The grant, or echelon, to which a student is entitled depends on family income plus a host of "situational criteria" such as other dependent siblings, distance from the nearest university, number of wage-earners in the family, and physical handicaps or health problems. A low grant situation--e.g., two wage-earners and only one other dependent sibling--would provide a maximum grant of FF12,744 [$1713] to students from families with incomes below FF40,400 [$5430], and would provide no award at all to students from families with incomes above FF68,300 [$9180]. The low grant situation, probably quite representative of French families receiving the need-based bourse, is shown in Figure 3. A high grant situation--e.g., completion of military service, a need to commute, and one dependent non-student and two dependent student siblings in the family--would provide a maximum grant of FF13,698 [$1877] to students from families with incomes (two years prior) under FF62,500 [$8400] and no grant to students from families earning more than FF105,700 [$14,207]. Because the severity of the means testing, only 10-12 percent of French students, and clearly only from the very poorest families, receive any direct taxpayer-borne assistance for the cost of student living, and the grants awarded are very small.

The abundant indirect taxpayer-borne assistance via subsidized meals and other services, plus the indirect tax advantages to parents whose children remain in higher education, plus the fact that the need-based awards, small as they are, are at least grants and not loans, unlike the German and major portions of Swedish and American assistance, may make the French bourse seem a little less ungenerous in comparison with other award programs. Nevertheless, the French taxpayer share of higher education costs faced by the student and family is the least of the five countries in my study.

If the expected parental contribution can be assumed to begin at the income level at which the need-based grants begin to be reduced, then French parents are expected to begin contributing at an income (two years prior) as low as FF40,401 [$5431]. Because the bourse is reduced franc-for-franc for term-time student earnings, it must be inferred that increases in the parental contribution (not student self-help) are expected to make up for decreases in the bourse with higher family income levels. Thus, the effective marginal tax rate--i.e., the increase in expected parental contribution (or decrease in grant) as incomes increase--is about 33 percent.

In short, although the total cash expenses faced by most French students and families are less than the expenses facing British, German, and Swedish students and their families, and are much less than the expenses faced by the American students and families contemplating high-priced private colleges, the absolute and proportionate burden faced by the low and lower-middle income family in France because of the extremely limited need-based grants is relatively much higher.

The students' share of costs in France is substantial although highly variable and unsystematic. There is no generally expected amount that students are to bear. Indeed, students entitled to a bourse are strongly discouraged from working part-time, and there is as yet no generally available student loan program in France. At the same time, many students report regular part-time jobs, and there are a number of student loan programs either through the ministry or the local CROUS for short-term emergency needs, or through private banks, available mainly, however, to children of substantial bank customers or to students preparing for highly-remunerative occupations in the elite Grandes Ecoles.

Sweden. There are no tuitions or fees to speak of in Sweden, so the expenses faced by the student and family are only the costs of student living. Sweden has a high cost of living, though, and does not provide subsidies especially for students, so these costs are relatively high by European standards and very comparable to public-sector expenses in the U.S. A student living at home probably needs about Skr28,033 [$3738], and a student living independently needs about Skr37,111 [$4948].

The major and immediate difference between Sweden and U.S. and the other countries of my study is the absence in Sweden of any officially expected parental contribution. Parents surely do help out, as is suggested by the dotted line in Figure 3, particularly more affluent parents willing to assist a child to live as a student above the level made possible by the standard governmental award. Nevertheless, it is both possible and common for a student to attend university with no financial assistance from the parents, however wealthy the parents may be. (We must also, however, recall the relatively flat income distribution in Sweden.)

Each full-time higher education student in good standing in Sweden is entitled to "Study Means," an award that contains a very small grant of Skr2178 [$290] and, for unmarried undergraduates, a substantial loan of Skr29,449 [$3927]. The Swedish Ministry does not like to acknowledge the concept of an "interest rate" in connection with Study Means, but the repayable amounts awarded begin growing (i.e., accruing interest) at, in 1985-86, the lesser of 4.2 percent per annum or the government's official "adjustment index" by which the rise in the cost of living is measured. At the end of a student's schooling plus a two-year grace period, during which period the accumulated repayable Study Means continues to accrue "interest" at 4.2 percent, repayments begin on a schedule sloping upward at the same 4.2 percent annual rate and extending usually through the student borrower's fiftieth year. Amounts due are deferred in the event of low income during the period the payment is due.

The Swedish student loans, bearing an effective 4.2 percent rate of interest from origination, are much less subsidized than the German BAföG, but are more subsidized than the American G.S.L. Using a 10 percent discount rate and assuming a 20-year repayment period, the "true loan" within the Swedish Study Means is just over 47 cents on the dollar--compared to just over 75 cents on the dollar for a U.S. Guaranteed Student Loan and 22 cents for the German BAföG.

At low and middle income levels, the Swedish system places an equal or slightly higher proportional burden on the student than does the U.S. system. At middle and higher levels of family income, where the U.S. parental contribution becomes extensive, the shares borne by students continue to be similar, with the Swedish taxpayers, via the loan subsidies, providing in Sweden what in the U.S. is provided by the parents.

Sharing the Costs in Five Countries: The bar graphs, presented as Figures 4, 5, and 6, summarize the portions of costs borne by each of the four bearers of burden--taxpayers, parents, students, and institutions/philanthropists--for U.K., the Federal Republic of Germany, France, and Sweden, and for three levels of costs in the U.S. What stands out are such observations as:

* the substantial burden borne by institutions and philanthropists in the U.S. and nowhere else (in the study group);

* the relatively high share at a very low income borne by parents in France;

* the near absence in Sweden of parental share at any income level;

* the absence of a student share borne in U.K. at any income level.

Lessons to be Learned

Let us now return, a bit more seriously, to the questions of "which is best?" or "what can we borrow from another system?" Actually, neither question is particularly useful. "Best and worst" and "good and bad" have little applicability in international comparisons of complex socio-economic-political-educational policies. Even borrowing the seemingly successful element of another country's system is rarely practical.

What is the good, then, of a comparative study--beyond the obvious interest we all have in the new and different, and beyond the obvious pleasure to the fortunate researcher who gets to spend time in London, Paris, Bonn, and Stockholm asking questions? The answers, and the rationale for the entire field of comparative policy studies, is that we emerge from a comparative study with a deeper understanding of why countries develop particular responses to their similar challenges, how and why our own system has evolved as it has, and what it might take to change it in certain ways.

To most of us in the U.S., for example, the U.K. system looks a bit odd because of the absence of any expected student contribution...the

Figure 4
Sharing the Cost of Higher Education for Low Income Families in U.K. Germany, France, Sweden, and the U.S., 1985-86.

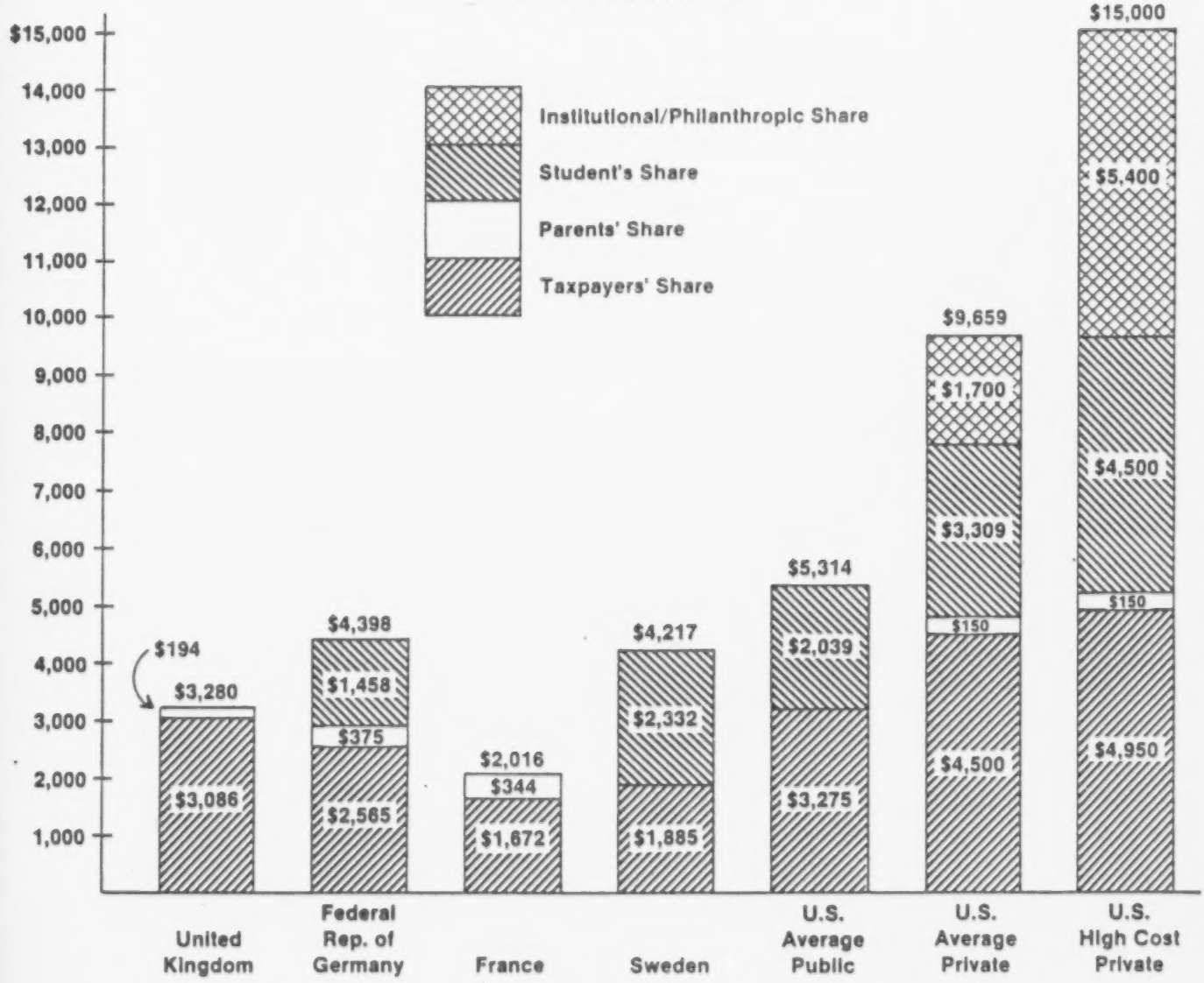


Figure 5
Sharing the Cost of College for Middle Income Families in U.K., Germany, France, Sweden and the U.S., 1985-86

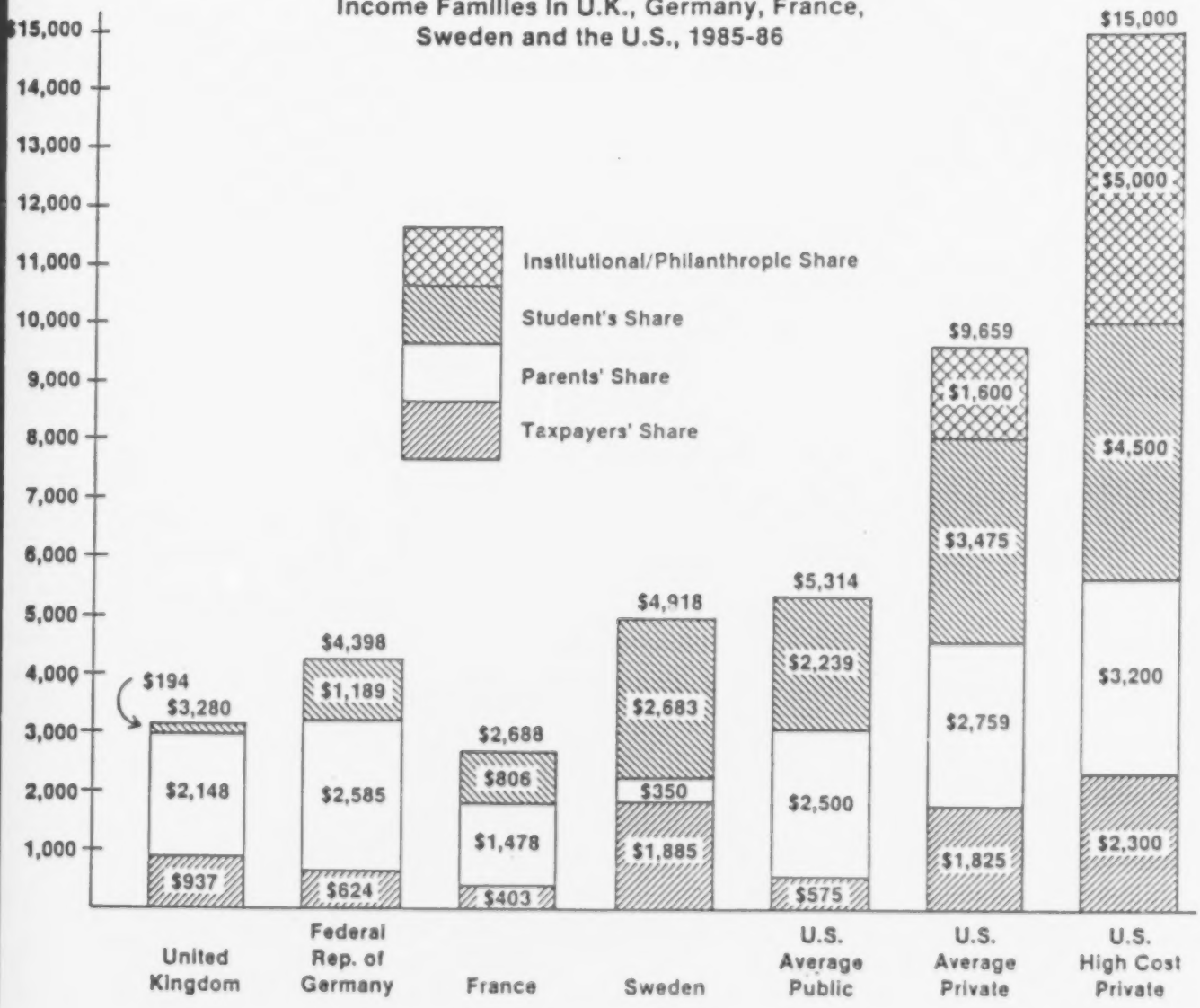
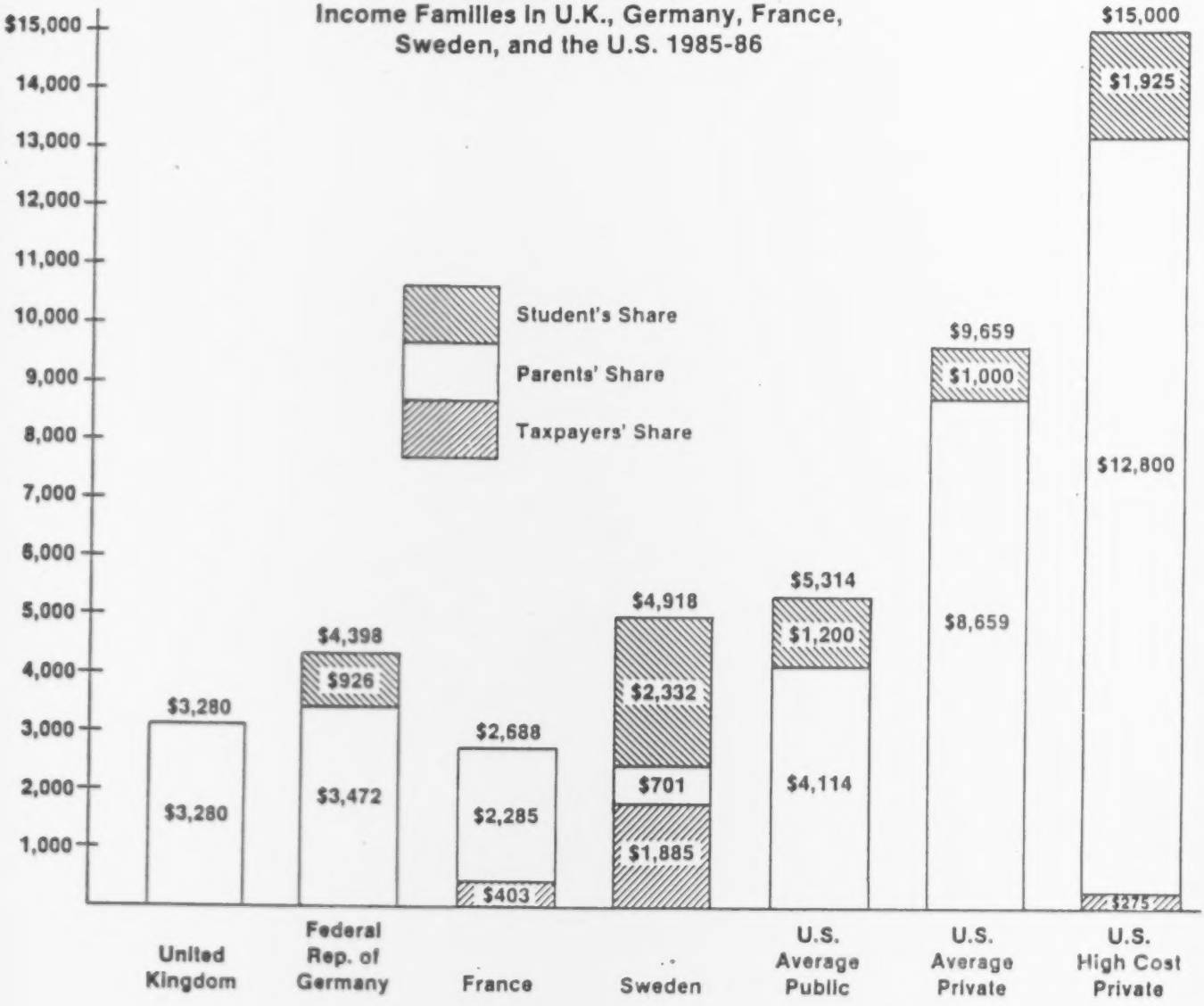


Figure 6
Sharing the Cost of College for High Income Families in U.K., Germany, France, Sweden, and the U.S. 1985-86



Swedish system similarly strange because of the absence of an expected parental contribution...the French system because of a seemingly meager taxpayer contribution and because of all of its disincentives to part-time work as well as to studying away from home...the German system because of the political blood that was shed over the imposition of a loan program that is not, in the end, so very different from the grant program that it supposedly superceded. Our system, if we may indeed call it that, must in turn look odd to colleagues from these other countries because of the aggressive competition on the part of institutions for students...the coexistence of public, private not-for-profit, and proprietary for-profit institutions of post-secondary and higher education...the enormous tuitions paid in the private sector and yet the competitive robustness of most of that sector vis-a-vis the lower-priced public sector...the bewildering (even to us) array of grant and loan programs and the almost total individualization of the ultimate price to the student and his or her family.

At the same time, a comparative study of student financial assistance policies and practices can help greatly in broadening our perspectives on the aims and the means of student financial assistance, on the political and cultural determinants of both our own public policies and our own private practices, and on the oftentimes subtle trade-offs between the various goals of, e.g.: equalizing higher educational opportunities, encouraging or discouraging certain kinds of degrees and curricula, economizing on the use of the taxpayer's dollar, enhancing (or at least not diminishing) one or another concept of distributional justice, and the like. For example, one can look to economic, political, or cultural explanations for the particular policies and procedures in a given country with respect to sharing the costs of higher education. Let us, by way of summary, look briefly at each of these possible kinds of explanations.

The Economic Perspective: The Non-Utility of the Traditional "Human Capital" Answer to the Question of "Who Should Pay?" Most of us were taught (and some of us may be guilty of teaching others) that the question of "who should pay?" follows the answer to the question "who benefits?" We all know the classic public finance rationale for a public subsidy--benefits not capturable by the individual, which justify public assumption of the same proportion of total costs that these public benefits are of total benefits. Like most economic principals, this one is true-by-definition, if one accepts the necessary assumptions about individual and collective economic behavior and is willing to ignore the complications of the surrounding cultural and political milieu. But I have yet to see any real question regarding the appropriate share of costs to be borne by student, parent, or taxpayer resolved or even usefully advanced by knowledge of, or even by sheer speculation on, an answer to the question "who gains?" In the West European countries in my study, in fact, the human capital concepts of public and private costs, benefits, and returns on investment seem to be of almost no interest to policymakers and of rather less interest than in the U.S. to the researchers and policy analysts.

The Political Perspective: The Importance, and the Limits, of the Immediately-Dominant Political Ideology. To some degree, the apportioning of the burden of costs of higher education follows traditional Western socio-economic-political ideology. The left, with its more favorable inclination toward a larger public sector and toward increased transfer payments to the

poor could be expected to favor a high proportion of taxpayer-borne costs. The right, on the other hand, could be expected to favor smaller taxpayer-borne expenditures and more reliance on "free choice" and a market-oriented apportioning of costs. To be sure, the conservative Regan, Thatcher, and Kohl governments in the U.S., U.K., and Germany have all attempted to lower if not the absolute amounts, then the recent rates-of-increase in direct grants to students, and to shift some additional costs to parents (at least to those who can afford to pay) and to students in the form of higher loan burdens and even the possible introduction in Europe of tuition. At the same time, all three of these conservative governments have failed to make substantial changes in the systems they inherited from their more liberal predecessors. The massive cuts in federal student aid proposed by the first and subsequent Regan budgets never materialized. The Thatcher government's trial balloons of means-testing the tuition grants and of introducing even a limited loan program were violently opposed by her own as well as the opposition parties. And the Kohl government's conversion of a grant to a loan program ended up with a loan so heavily subsidized that it changed very little the ultimate division of burden between students and taxpayers.

In the meantime, France, nominally run by a Socialist-dominated coalition, has one of the least generous programs of aid to the children of the very poor. Sweden, arguably the most consistently egalitarian nation of Western Europe, has almost no grants at all (beyond, of course, the traditionally free public higher education), and Sweden provides no special financial assistance to the children of poor parents.

In short, the immediately-dominant political ideology may point the way or apply pressure toward some shift in the apportioning of cost burden among parents, students, and taxpayers. Knowledge only of the ideology, though, at least as represented by the party or coalition in power, does little to predict the cost-sharing characteristics of a particular system. Furthermore, a fundamental change in that system is not much easier to effect through a mere change in government than it is through the arguments of the human capital economist.

The Cultural Perspective: Sharing the Costs of Higher Education. Policies and instruments for apportioning the costs of higher education seem, rather, to be functions of traditions and beliefs with roots far deeper and more complex than either party ideology or economic sophistication. For want of a better word, I will call these roots "cultural," and I will close my address with just one example: an attempt to account for the difference between the U.S. and the Swedish treatment of the parents' responsibility for the support of the costs of student living.

In the U.S., the college years, or at least the undergraduate portion thereof, have traditionally been more nearly an extension of childhood than a beginning of adulthood. The typical U.S. undergraduate begins college at age 17 or 18, incompletely educated even in the most general sense, still in almost complete financial dependence on his or her parents, and very often with no clear occupational goal and little sense of adult civic and social responsibilities. Little wonder that we have built a system of sharing the costs of higher education on the primacy of the parental contribution. And no wonder, too, that our system becomes increasingly strained as more and

more of our undergraduates are not 17 to 22 year-olds from two-parent households, but are mature adults and/or not living with both natural parents anyway.

Furthermore, much American social welfare tradition is built on the principle of "means testing" or "targeting": i.e., certain goods or services are made available at public expense, but only upon demonstration of "need," which generally means demonstration of some degree of poverty and dependency. We do not like to give away goods and services that people might be able and willing to buy. Financial assistance in the U.S., then, begins with the premise that parents should pay as much as they can afford in support of their children's higher education. But public and philanthropic assistance steps in if the parents declare their inability to pay all that is necessary. In this sense, need-based financial assistance, coupled with the underlying expected parental contribution, are parts of a system of income redistribution that subsidizes for poor people certain otherwise expensive but so-called essential goods and services like food, rent, and health care--as opposed to systems of income maintenance or outright transfer payments that redistribute income without regard to expenditure or use. Students and parents who are jointly recipients of this aid, then, may be expected to be grateful for the assistance--which assistance, in turn, needs to be only that minimal amount necessary to make college attendance possible, generally in concert with student self-help and with any minimal contribution the parents can muster.

Let us, in contrast, look at Sweden, with its absence of any expected parental contribution. There, as in most of the rest of Europe, higher education may be more easily construed as the start of adulthood rather than as the end of childhood. The Swedish undergraduates are a bit older than their traditional American counterparts. They are more likely to have completed their general education in the Swedish academic secondary school and to be entering the university for the start of specific professional studies.

They look upon university studies not so much as something that they are especially fortunate to be able to do and for which privilege they should be pleased to live under the twin burdens of collegiate poverty and parental dependency, but as their proper calling at this stage of their lives, not unlike the workplace for their age peers who are not in higher education. Funds should be made available to those whose calling is the university, whether as a "study wage," a student grant or as a repayable grant, to enable them to live more-or-less like others of their age--and certainly not in any prolonged state of dependence on their parents.

At the same time, Sweden has achieved a very high degree of income equalization through progressive income taxes, high minimum wages, high employment, and the absence of any significant non-productive underclass. Sweden thus has no need of targeted income transfers--to parents of university students or to other categories of "worthy poor"--to even further redistribute income. In fact, there is some thought in Sweden that targeting aid and requiring some families to declare their need would be demeaning as as well as unnecessary.

Furthermore, one of the principal arrangements on behalf of an expected parental contribution is that the abandonment of such a contribution, once in place, would constitute the lifting of a burden from--and thus an effective transfer of income to--a set of parents who are predominantly upper and upper-middle class. By having long since abandoned its expected parental contribution, Sweden has already experienced whatever redistributive impact that abandonment may once have brought about. From the standpoint of distributive justice, Sweden no longer has a compelling reason to maintain an expected parental contribution--for the simple reason that it no longer has one.

There is always the danger of glib oversimplification in such analyses. And I have probably already said more about Sweden than I know for certain. But my point is that a comparative perspective adds a depth and richness to our understanding of certain issues--e.g., the parental contribution--that we will be struggling with for years.

We do share with other countries essentially the same goals and constraints for our systems of higher educational finance and student assistance, and we share the same parties--students, parents, taxpayers, and philanthropists--on whose shoulders must be placed the costs of college.

Surely, this is ample reason to better understand one another, and I encourage more of you to join in the comparative exploration of our field.

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SURVEY DESIGN AND ADMINISTRATION

by
Diane O'Rourke
Survey Research Laboratory
University of Illinois

Third Annual NASSGP/NCHELP Conference on Student Financial Aid Research
Loyola University of Chicago
Chicago, Illinois
May 29, 1986

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Survey Research Laboratory

The Survey Research Laboratory (SRL) is an all-campus research and service unit of the University of Illinois with offices on the Urbana-Champaign and Chicago campuses. Established in 1964, SRL has a staff of over 30 survey professionals, plus trained interviewers and coders. SRL maintains survey facilities for conducting complete survey projects from initial study design through data analysis, for undertaking partial survey work such as sample design, data collection, or data reduction, or for assisting in data file development and analysis.

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SRL's services are available to University faculty, staff, and students and to state, local, and federal agencies, as well as to other groups working in the public interest. The Laboratory maintains a staff of survey specialists from various disciplines and provides the following services:

- Survey design and questionnaire construction
- Planning and implementation of sampling procedures
- Telephone and mail data collection for national and regional surveys
- Computer assisted telephone interviewing
- Face-to-face data collection in Illinois and selected areas as needed
- Data entry and on-line coding and cleaning
- Data processing, analysis of survey data, and data file development and management
- Consultation on survey problems
- Noncredit workshops and lectures on various aspects of surveys and data analysis
- Lectures for regularly scheduled research methods or survey-related courses
- Maintenance of a survey research library
- Publication of *Survey Research*, an international newsletter reporting on the activities of academic and other survey research organizations

SRL services are available to faculty, government agencies, and others who seek or have received contract or grant support for research entailing surveys. Where appropriate, assistance is provided for proposal development, including advice on research design and preparation of the budget for the survey. SRL has conducted major projects funded by the National Science Foundation, U.S. Department of Health and Human Services, U.S. Department of the Treasury, the National Institutes of Health, and many Illinois agencies.

Fees

SRL's services are available to government agencies, faculty, students, and others on a fee-for-service basis. Detailed cost estimates can be provided on request. In addition, one hour of free consultation is available per year to any group or individual.

For Further Information

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Sampling specialists are responsible for the design and selection of samples for SRL studies and consult on the sample design for other surveys. They select samples as needed for general or special populations and also maintain a computerized file of all telephone exchanges and prefixes in the United States.

The **Field staff** plans and conducts data collection by mail, telephone, and/or face-to-face interview. Telephone surveys are conducted from our centrally supervised Telephone Center in Urbana on a local, statewide, or national basis, using the University's least-cost routing system for long distance calls. Computer assisted telephone interviewing (CATI) is available. For face-to-face interviewing, SRL has available a field staff of about 175 interviewers throughout Illinois. Interviewers outside Illinois are recruited when needed.

The **Data Analysis** staff is responsible for several functions. The data reduction staff edits, codes, and enters survey and other data and performs sample control and data cleaning in conjunction with the data processing staff. The data processing staff also carries out the analysis of survey and other data using a variety of computer programs and languages. Data entry, coding, and processing services are available on a cost reimbursement basis. SRL also has extensive experience providing statistical and data management consultation.

The **Survey Research Information Services** include the Survey and Census Data Library, housed in Urbana. The library serves as a reference source for survey reports, methodological publications, census and other governmental reports, and other survey-related materials.

SURVEY RESEARCH LABORATORY
University of Illinois

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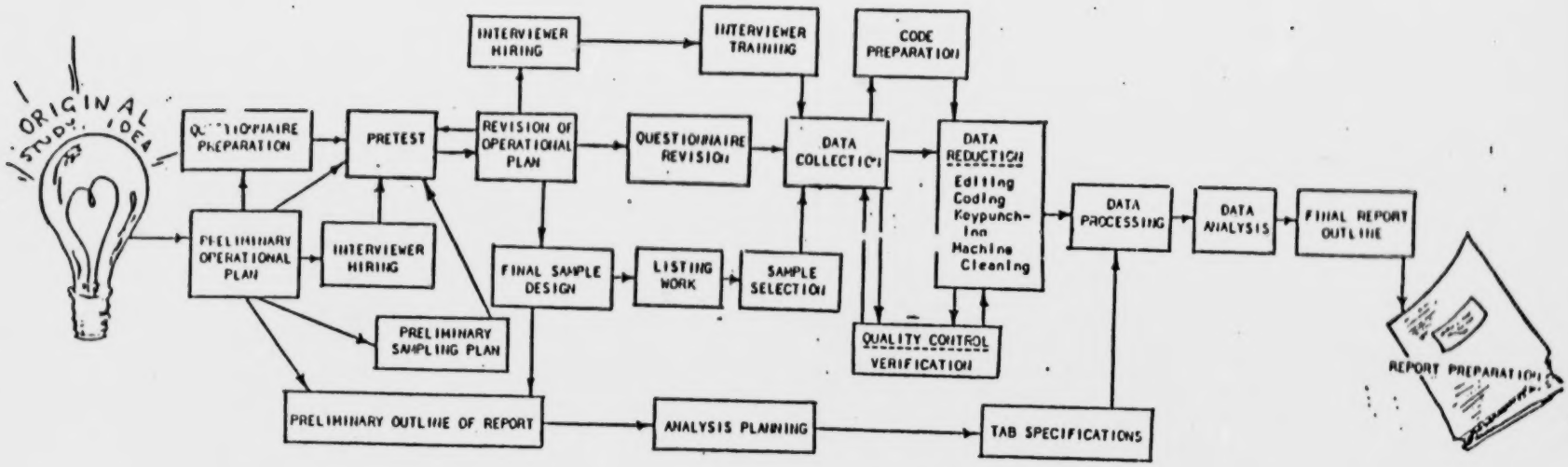
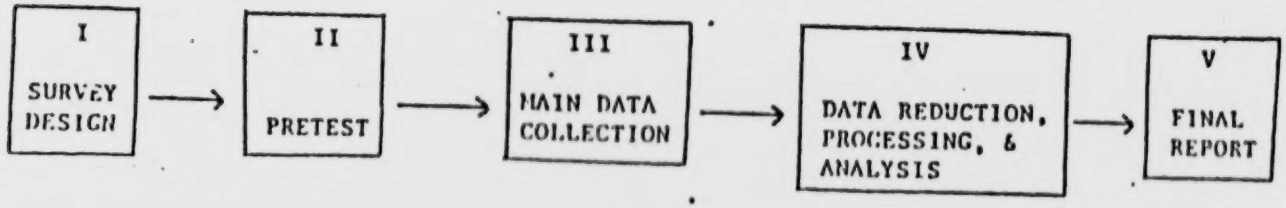
STUDY DESIGN

STAGES OF A SURVEY





BASED ON NUMBER OF EXPECTED RESPONDENTS

SAMPLING ERROR TOLERANCE OF ± (At 95% Confidence)

% YES OR NO DICHOTOMOUS RESPONSES

Size Of Sample Or Sub-Sample	1% Or 99% ±	2% Or 98% ±	3% Or 97% ±	4% Or 96% ±	5% Or 95% ±	6% Or 94% ±	8% Or 92% ±	10% Or 90% ±	12% Or 88% ±	15% Or 85% ±	20% Or 80% ±	25% Or 75% ±	30% Or 70% ±	35% Or 65% ±	40% Or 60% ±	45% Or 55% ±	50% ±
25	4.0	5.6	6.8	7.8	8.7	9.5	10.8	12.0	13.0	14.3	16.0	17.3	18.3	19.1	19.6	19.8	20.0
50	2.8	4.0	4.9	5.6	6.2	6.8	7.7	8.5	9.2	10.1	11.4	12.3	13.0	13.5	13.9	14.1	14.2
75	2.3	3.2	3.9	4.5	5.0	5.5	6.2	6.9	7.5	8.2	9.2	10.0	10.5	11.0	11.3	11.4	11.5
100	2.0	2.8	3.4	3.9	4.4	4.8	5.4	6.0	6.5	7.1	8.0	8.7	9.2	9.5	9.8	9.9	10.0
150	1.6	2.3	2.8	3.2	3.6	3.9	4.4	4.9	5.3	5.9	6.6	7.1	7.5	7.8	8.0	8.1	8.2
200	1.4	2.0	2.4	2.8	3.1	3.4	3.8	4.3	4.6	5.1	5.7	6.1	6.5	6.8	7.0	7.0	7.1
250	1.2	1.8	2.2	2.5	2.7	3.1	3.4	3.8	4.1	4.5	5.0	5.5	5.8	6.0	6.2	6.2	6.3
300	1.1	1.6	2.0	2.3	2.5	2.7	3.1	3.5	3.8	4.1	4.6	5.0	5.3	5.5	5.7	5.8	5.8
400	.99	1.4	1.7	2.0	2.2	2.4	2.7	3.0	3.3	3.6	4.0	4.3	4.6	4.8	4.9	5.0	5.0
500	.89	1.3	1.5	1.8	2.0	2.1	2.4	2.7	2.9	3.2	3.6	3.9	4.1	4.3	4.4	4.5	4.5
600	.81	1.1	1.4	1.6	1.8	2.0	2.2	2.5	2.7	2.9	3.3	3.6	3.8	3.9	4.0	4.1	4.1
800	.73	.98	1.2	1.4	1.5	1.7	1.9	2.1	2.3	2.5	2.8	3.0	3.2	3.3	3.4	3.5	3.5
1000	.61	.90	1.1	1.3	1.4	1.5	1.7	1.9	2.1	2.3	2.6	2.8	2.9	3.1	3.1	3.2	3.2
1200	.56	.81	.99	1.1	1.3	1.4	1.6	1.7	1.9	2.1	2.3	2.5	2.7	2.7	2.8	2.8	2.8
1500	.51	.73	.89	1.0	1.1	1.2	1.4	1.6	1.7	1.9	2.1	2.3	2.4	2.4	2.5	2.5	2.5
2000	.44	.61	.75	.86	.96	1.0	1.2	1.3	1.4	1.6	1.8	1.9	2.0	2.1	2.2	2.2	2.2
2500	.40	.56	.68	.78	.87	.95	1.1	1.2	1.3	1.4	1.6	1.7	1.8	1.9	2.0	2.0	2.0
3000	.36	.51	.62	.71	.79	.87	.99	1.1	1.2	1.3	1.5	1.6	1.7	1.7	1.8	1.8	1.8
4000	.31	.44	.54	.62	.69	.75	.86	.95	1.0	1.1	1.3	1.4	1.4	1.5	1.5	1.6	1.6
5000	.28	.40	.49	.56	.62	.68	.77	.85	.92	1.0	1.1	1.2	1.2	1.3	1.4	1.4	1.4
7500	.23	.32	.39	.45	.50	.55	.62	.69	.75	.82	.92	1.0	1.0	1.1	1.1	1.1	1.1
10000	.20	.28	.34	.39	.44	.48	.54	.60	.65	.71	.80	.82	.87	.92	.95	.98	.99
15000	.16	.23	.28	.32	.36	.39	.44	.49	.53	.59	.63	.66	.71	.75	.78	.80	.80
25000	.12	.18	.22	.25	.27	.31	.34	.38	.40	.41	.45	.50	.55	.58	.60	.62	.62
50000	.09	.11	.14	.16	.17	.19	.22	.24	.26	.29	.32	.35	.37	.38	.39	.40	

TYPICAL FOR ACADEMIC STUDIES

11900	48227	69249	64706	40568	45995	51827	54247	01321	51200	00000
11901	31758	41671	42683	53661	61073	52257	18840	73881	86470	05921
11902	10563	98484	10132	06890	78458	71924	86091	92782	23613	44875
11903	22843	88886	31451	94813	89675	41003	70558	93808	67610	48242
11904	53541	24374	48228	56684	45211	21822	90026	30283	37101	85432
11905	68195	40178	56754	82964	48093	58031	37235	87671	63906	37026
11906	34503	07521	03333	15958	56300	13594	20373	39092	12721	71885
11907	58210	31657	06376	33733	21945	17358	51676	61100	22937	23869
11908	36410	95042	76259	47696	95975	85038	92736	03104	39582	85768
11909	19893	63843	37962	90939	43632	36332	86863	94710	37085	17894
11910	93386	25252	84538	69625	32599	28225	28861	10830	47219	51026
11911	58883	97408	89435	89307	42044	47970	34740	86375	86058	42219
11912	42261	15285	47609	85243	00231	81640	15070	50940	47854	89816
11913	60986	92968	49773	62499	65775	05023	78128	77141	31971	83558
11914	67993	66941	61853	64931	58063	01856	90094	05949	91836	79741
11915	98018	85741	01798	63054	95803	41799	52485	05372	21023	84904
11916	07645	33465	04386	76028	63812	25166	77108	77585	29104	61186
11917	79525	50238	08120	74622	46055	54750	17848	37617	32242	62805
11918	05997	44081	15164	54661	47431	12712	60304	89224	70332	35910
11919	53448	19990	60212	89971	82649	59514	84142	75947	72960	19514
11920	92089	47865	70069	55733	29792	93778	60836	84741	91757	29652
11921	47517	10869	29048	67434	12951	90819	95321	84173	08091	11352
11922	47442	42595	35731	84273	62435	52913	67023	10690	44140	43778
11923	03340	89363	58484	95257	60167	44554	46001	48806	24116	57795
11924	61294	10252	28924	65316	11381	36015	27995	36312	00287	31059
11925	88256	96622	55935	60812	34861	50039	90509	42819	78993	37952
11926	94081	13341	63658	91972	01337	51574	37554	81364	34515	05343
11927	54955	87712	19091	23148	92095	11037	53354	88039	71547	44185
11928	97410	98479	10199	25249	43156	20260	88886	07871	42338	43725
11929	45637	37868	25550	41804	36201	00459	63543	68632	78429	02935
11930	72627	57035	40665	69491	01707	84422	17907	52752	74672	90124
11931	52033	15383	70726	00947	48499	88303	75179	75638	54666	02122
11932	06859	81002	59394	95745	74313	80735	33791	39955	22858	78965
11933	10714	90918	47077	39458	43105	49657	60414	11356	54584	41827
11934	94107	22116	54676	59374	87108	45530	19282	76351	56724	72294
11935	93504	82434	56725	90151	25352	30241	61609	42681	26883	30493
11936	91169	48324	87523	14356	80849	27125	58568	01931	79140	79205
11937	36221	17167	41481	44754	32950	33940	73691	50748	98734	97822
11938	36838	27320	40602	42015	72334	08110	12583	67355	98022	88484
11939	83288	65896	55197	77399	09297	26980	12802	26179	15114	81075
11940	36018	34455	05699	11231	88169	87681	03186	42615	12164	04281
11941	12108	39671	47422	70681	27783	20842	60601	02082	09266	76378
11942	53756	20505	31722	74269	70286	52166	07004	40429	10467	32023
11943	96437	48351	26790	13215	49740	69318	64043	16685	61868	73114
11944	60059	19403	35914	73749	16172	81547	32114	37980	74589	36516
11945	66331	57355	82736	80670	31623	70050	72379	53126	09965	24502
11946	98460	32688	72068	65457	40724	11103	08819	83304	37216	01481
11947	25162	57865	58997	65375	82018	19932	55586	05503	35810	73898
11948	04082	48151	61951	54972	40850	08816	46758	63382	26169	38795
11949	94565	49831	90001	60072	47078	21524	85969	63290	96728	40912

Comparison of Major Survey Methods

Aspect	Mailed Questionnaires	Telephone Interviews	Face-to-Face Interviews
Response rate	45%-75%	70%-90%	75%-95%
Response bias	Medium/High (favors high SES persons)	Low/Medium (Low with RDD) RANDOM DIGIT DIALING	Low
Sampling frame bias	Low to high	Low to high (Low with RDD)	Low
Knowledge of refusals and non-contacts	Poor	Poor	Fair
Cost	Low	Low/Medium	High
Length of data collection period	Long (12 weeks)	Short (2-4 weeks)	Medium/Long (4-12 weeks)
Geographic distribution of sample	May be wide	May be wide	Must be clustered
Use of household/ personal records	Very good	Fair	Good
Rapport	Fair	Good	Very good
Control of response situation	Poor	Fair	Good
Quality of recorded responses	Fair/Good	Very good	Very good

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Illinois State Bar Association

ASSURANCE OF EASE/SIMPLICITY

OFFICE OF THE PRESIDENT

JOHN R. MACKAY
200 EAST WILLOW AVE.
WHEATON, ILLINOIS 60187

PURPOSE/IMPORTANCE OF STUDY

SAMPLING PROCEDUR

Dear Colleague:

The Illinois State Bar Association, with the assistance of the Chicago Bar Association, and the Illinois Institute of Continuing Legal Education, is conducting a survey of all licensed attorneys in the State of Illinois. We are interested in updating our economic survey of 1960, 1964 and 1971, and soliciting your opinions on two issues of growing concern -- legal specialization and prepaid and group legal service.

Data produced by this survey will have a broad audience. Each lawyer will find the results personally interesting. Courts will find the data important in setting reasonable fees in certain cases. Your opinions on problems in specialization, and methods of recognition or certificiation, will advise the courts and bar associations in these areas of changing practice. Your completion of the survey will be important in defining ethical problems and answers in specialization and group legal service areas. In summary, this survey's data will serve you, the court the public and others in matters even now undergoing dynamic change.

The questionnaire form has been designed so that most questions can be answered by simply circling the appropriate number. Completion of the questionnaire should take only a few minutes of your time. It is important, however, that you read the accompanying brief material on legal specialization and prepaid and group legal services before completing the questionnaire.

You will find enclosed a return envelope addressed to the Illinois State Bar Association. The Survey Research Laboratory of the University of Illinois will process and analyze the responses. The information you provide will, of course, be held in strict confidence and used only in an anonymous summary form as a basis for a statistical analysis. Result will be published as a final report and made available to all interested attorneys in the state.

We thank you for giving your prompt attention to this survey, and hope that we will hear from you shortly.

EXPRESSION OF APPRECIATION/PROMPT REPLY

Sincerely,

John R. Mackay

PERSONALIZED SIGNATURE

INCENTIVE

John R. Mackay

JRM/bfm

Enclosures

STATEMENT OF CONFIDENTIALITY

Questionnaire Design

Question Wording

Vocabulary --

- Consider vocabulary (and reading ability) of least educated respondent
- Be sure that all respondents know what a term means (e.g., "professional jargon")
- Offer definitions if necessary

Frame of reference --

- Clarify time frame (Have you ever... In the last 12 months ...)

Response choices --

- Should be mutually exclusive and exhaustive (other, specify)
- Try to anticipate responses
- If possible, offer response choices rather than leaving the question "open"

Eliminate bias --

- Use symmetric response choices (e.g., 2 positive, 2 negative)
- Avoid emotionally-loaded words

Questionnaire Organization

-- Begin with simple, easy to answer questions

-- Questions should follow logical order (subsections may be helpful)

-- Don't ask too many questions of the same type in sequence

-- Put demographic and other sensitive questions at the end of questionnaire

-- Format and layout

  -- Should be uncluttered (don't cram page)

  -- Must ha e clear skip patterns and other instructions

  -- Need adequate space for answering open-ended questions

  -- Should be precoded for easy data processing

OFFICE USE ONLY		
Quest. #	_____	1-3
Enr.	_____	4
J-S	_____	5
Study	198	6-8

5/74 STUDY ON GRADUATE EDUCATION IN HEALTH EDUCATION

(Please circle one code number for each question unless otherwise instructed.)

1. Which of the following best represents your current position? *(Circle one)*

Administrator 1 9
Elementary Teacher 2
Junior High Teacher (7-9) 3
Senior High Teacher (10-12) 4
School Nurse 5
Other _____ 6
(Please specify)

2. Has any information about the Critical Health Problems and Comprehensive Health Education Act been given to you?

Yes 1 10
No *(Skip to Q.4)* 2

3. Who first gave you this information? *(Circle one)*

Superintendent of Schools 1 11
Building Principal 2
Department Chairman 3
Fellow Teacher 4
Curriculum Supervisor 5
Other _____ 6
(Please specify)

4. Are you interested in taking additional health courses for graduate credit?

Yes 1 12
No *(Skip to Q.12)* 2

5. When would it be most convenient for you to take courses during the summer? *(Circle one)*

Mornings	1	13
Afternoons	2	
Evenings	3	
It doesn't matter when	4	
(Don't want to take courses during the summer--Skip to Q.7)	5	

6. What type of schedule for taking a course would you prefer during the summer? *(Circle one)*

1 hour a day for 8 weeks	1	14
2 hours a day for 4 weeks . . .	2	
4 hours a day for 2 weeks . . .	3	
8 hours a day for 1 week	4	
Other _____ *(Please specify)*	5	

7. During the school year, what would be the most convenient time for you to attend graduate classes? *(Circle one)*

Day	Afternoon	Evening	
Monday	01	02	15,16
Tuesday	03	04	
Wednesday	05	06	
Thursday	07	08	
Friday	09	10	
	Morning	**Afternoon**	
Saturday	11	12	
(Don't want to take courses during the school year)	13		

8. How far would you be willing to travel (one way) to attend class?

Less than 10 miles	1	17
11 to 20 miles	2	
21 to 30 miles	3	
31 to 40 miles	4	
More than 40 miles	5	

9. Which one of the following schools is closest to your home?

Eastern Illinois University	1	18
Illinois State University	2	
Southern Illinois University (Carbondale)	3	
University of Illinois (Urbana)	4	
Western Illinois University	5	

10. How many miles is the above school from your home?

Less than 10 miles	1	19
11 to 20 miles	2	
21 to 30 miles	3	
31 to 40 miles	4	
More than 40 miles	5	

11. To what extent have <u>each</u> of the following influenced your decision to continue your education? *(Circle one number for <u>each</u> statement)*

	Major reason	Minor reason	Not a reason	
a. Financial betterment	1	2	3	20
b. Self improvement	1	2	3	21
c. Employer pressure	1	2	3	22
d. To meet certification	1	2	3	23
e. To become a better teacher	1	2	3	24
f. To work toward a graduate degree	1	2	3	25
g. Because of the new health education law	1	2	3	26

(Please skip to Q.13)

(For those not interested in taking graduate courses)

12. To what extent have each of the following influenced your decision <u>not</u> to continue your education? *(Circle one number for <u>each</u> statement)*

	Major reason	Minor reason	Not a reason	
a. Not financially able	1	2	3	27
b. No interest at this time	1	2	3	28
c. No time available	1	2	3	29
d. Courses are not conveniently located	1	2	3	30
e. No need for additional courses	1	2	3	31
f. No interest in health courses	1	2	3	32

13. Which of the following courses do you teach? *(Circle all that apply)*

Health Education	1	33
Physical Education	2	34
Biology	3	35
Home Economics	4	36
Other _____ *(Please specify)*	5	37

14. What percent of your teaching load is devoted to teaching health education?

Less than 25% . .	1	38
25% to 49% . . .	2	
50% to 74% . . .	3	
75% to 99% . . .	4	
100%	5	

15. Which of the following are you <u>certified</u> to teach? *(Circle all that apply)*

Health Education	1	39
Physical Education	2	40
Biology	3	41
Home Economics	4	42
Other _____ *(Please specify)*	5	43

16. What is your <u>primary</u> educational interest? *(Circle one)*

Health Education	1	44
Physical Education	2	
Biology	3	
Home Economics	4	
Other _____ *(Please specify)*	5	

17. Do you feel qualified to teach health education?

Yes	1	45
No	2	

18. What is your highest academic degree?

Associate Degree . . .	1	46
Baccalaureate	2	
Master's Degree . . .	3	
Doctorate	4	
Other _____ *(Please specify)*	5	

19. When did you receive your last degree?

Less than 2 years ago . . . 1 47
2 to 10 years ago 2
11 to 20 years ago 3
More than 20 years ago . . 4

20. When is the last time you enrolled in a graduate class?

Less than 2 years ago . . . 1 48
2 to 10 years ago 2
11 to 20 years ago 3
More than 20 years ago . . 4
I have never enrolled . . . 5

21. How many years have you been teaching?

Less than 2 years 1 49
2 to 10 years 2
11 - 20 years 3
More than 20 years 4

22. How long do you plan to continue teaching in Illinois?

Less than 2 years 1 50
2 to 10 years 2
11 to 20 years 3
More than 20 years 4
I have no idea 5

23. What is your sex?

Male 1 51
Female . . . 2

24. Please answer the following statements by indicating the response that best describes your feelings. *(Circle one response for each statement)*

	Strongly agree	Agree	Disagree	Strongly disagree	
a. I prefer workshops to instructional type classes	1	2	3	4	52
b. Coursework should be more related to practical experience and less to theory	1	2	3	4	53
c. Extension courses are not as good as the same courses taken on campus	1	2	3	4	54
d. Teaching requires an occasional course to keep abreast of changes in the field	1	2	3	4	55
e. I don't think I will ever become a full-time student again	1	2	3	4	56
f. It would be a good idea if colleges and universities worked together to provide more courses closer to my community	1	2	3	4	57
g. I am interested in attaining a Master's degree in <u>health education</u>	1	2	3	4	58

(For each of the following areas, please answer questions 25, 26, and 27)

25. Have you taken courses in any of the following areas at the undergraduate and/or graduate level?

	LEVEL			
	Undergraduate		Graduate	
	Yes	No	Yes	No
a. Advanced Concepts of Health (e.g., health and human Ecology, Scientific Foundations, Human Conservation)	1	2	1	2
b. Problems In School Health (e.g., Organization and Administration of School Health, Problems in School Health, Methods and Materials of Health Education, Health in the Elementary Schools, Health in the Secondary Schools)	1	2	1	2
c. Programs In Community Health (e.g., Introduction to Public Health, Principles of Public Health Organization, Problems in Public Health)	1	2	1	2
d. Curriculum Development and Evaluation in Health Education (e.g., Workshop in Health Curriculum Development, Theory and Design of Health Curriculum, Evaluation in Health Education)	1	2	1	2
e. The Growing and Developing Organism (e.g., Growth and Development, Human Life Cycle)	1	2	1	2
f. Ecological Relationships (e.g., Human Ecology and Health, Man and His Diseases, Epidemiology)	1	2	1	2
g. Disease Control (e.g., Control and Prevention of Communicable or Chronic Disease)	1	2	1	2
h. Human Sexuality and Family Life (e.g., Marriage and the Family, Sex Education, Human Sexuality)	1	2	1	2
i. Food Practices and Eating Patterns (e.g., Nutrition, Man, Culture, and Food)	1	2	1	2
j. Consumer Health and Resources (e.g., Consumer Education, Selection and Utilization of Health Resources)	1	2	1	2
k. Safety (e.g., First Aid, Safety Education)	1	2	1	2
l. Mood Modifying Substances (e.g., Drug Education)	1	2	1	2
m. Personal Health Practices (e.g., Personal Health and Hygiene, Health and Modern Life)	1	2	1	2
n. Mental and Emotional Health (e.g., Mental Hygiene, Principles of Mental Health, Child and Adolescent Psychology)	1	2	1	2

26. How many years ago was the last course in each area taken?					27. How interested would you be in taking a graduate course in each area?			
1-3 years	4-6 years	7-9 years	10 years or more	(Never)	Very interested	Moderately interested	Not interested	
. . . 1	2	3	4	7	1	2	3	59-62
. . . 1	2	3	4	7	1	2	3	63-66
. . . 1	2	3	4	7	1	2	3	67-70
. . . 1	2	3	4	7	1	2	3	71-74
. . . 1	2	3	4	7	1	2	3	75-78 79 | BK 80 | 1
. . . 1	2	3	4	7	1	2	3	1-3 | DUP 4-7
. . . 1	2	3	4	7	1	2	3	8-11
. . . 1	2	3	4	7	1	2	3	12-15
. . . 1	2	3	4	7	1	2	3	16-19
. . . 1	2	3	4	7	1	2	3	20-23
. . . 1	2	3	4	7	1	2	3	24-27
. . . 1	2	3	4	7	1	2	3	28-31
. . . 1	2	3	4	7	1	2	3	32-35
. . . 1	2	3	4	7	1	2	3	36-39 40-79 | BK 80 | 2

Thank You For Your Cooperation.

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Improving Response Rates To Health Surveys Using Mail Questionnaires

Diane P. O'Rourke, M.A.
Thomas W. O'Rourke, Ph.D., Tau Chapter

Introduction

The health area is no stranger to surveys. For example, the National Health Survey provides a weekly assessment of the morbidity-disability status of the American population. More locally, health departments, voluntary health agencies, professional associations and universities, as well as local public school districts are often involved in conducting surveys. However, there are many ways to conduct a survey, including right and wrong ways. Often, well-intentioned surveyors fall victim to any number of possible pitfalls. One of the most common problems is the lack of an adequate response rate. This can be extremely frustrating since one may have devoted a lot of time, energy and money to develop a good survey form, and then selected an appropriate sample and planned how to analyze the data, which unfortunately never came. Some people just take whatever data they do get and analyze it anyway. The simple fact is that the confidence one can have in one's data is directly related to the response rate. The higher the response rate, the less bias and the more confidence the researcher can have in his or her results. The purpose of this article is to provide easily understandable and practical information about how one can improve response rates in mail questionnaires. It should be emphasized that the suggestions provided are not just based on our cumulative experience. Rather, they are based primarily on a synthesis of research studies designed to identify the best ways to improve the response rates. So, an individual planning to conduct a survey should find the following information most useful. Following these suggestions will help in making the entire process more worthwhile and personally satisfying.

In conducting survey research, one of the most important considerations to be determined is the method by which the questionnaire will be administered. The three main methods utilized are mail, telephone, or face-to-face. Although the telephone and face-to-face methods allow for more flexibility in questioning, they have the drawback of the additional expense of paying an interviewer. A mail questionnaire, on the other hand, circumvents this additional cost by utilizing a self-administered approach to the survey instrument. Besides the lower cost affiliated with this lack of an interviewer, a mail survey also has additional advantages, such as geographical flexibility, the ability to reach large samples, possibly nationwide at one time rather than over a period of weeks or months, the lack of interviewer bias, and the convenience to the respondent of being able to complete the questionnaire, verify records and consult others at the time of his/her choosing. On the other hand, the main disadvantage of a mail questionnaire is the low response rate which is usually affiliated with its use. Of course, this problem is then interpreted into a response bias which can be very serious if measures are not taken to rectify or at least understand the bias involved. Mail questionnaires have other drawbacks, such as the inability to probe a response to a question or the inability to utilize open-ended questions to a large extent. However, it is the response rate factor which is the most important consideration and is the area of primary concern for the researcher.

In the continuing search to improve the response rate to a mail questionnaire, numerous research studies have been conducted which compare the effectiveness of various factors in increasing the response rate. Some of these studies will now be discussed. (For the most part, overall findings will be discussed in very general terms. For more specific information, the reader is directed to the appropriate references.)

Factors Studied Relating to Response Rate

Pre-Contact

Pre-contact refers to contact with the prospective respondent prior to the receipt of the mail questionnaire. This contact can be in the form of a letter or postcard mailed to the prospective respondent or a telephone call or personal visit. Many studies have indicated that advance contact does help to increase response rate(6,18,34,36,39), while other studies have shown mixed results(4,5). Relating response rates to study costs, Myers and Hauge(31) noted that precontact increased their response rates by 8 percent but increased costs by 22 percent.

Personalization

The personalization of a questionnaire usually occurs on the envelope or in the cover letter. Methods of personalization include hand addressing the envelope, hand signing the

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cover letter, individually typing the cover letters, or individually typing the address block of the letter. In regard to personalization, the results are mixed. While some studies have shown personalization to increase the response rate(25,29), other studies have shown that the effects of personalization may differ by type of respondent, will show no significant difference, or, may even result in lower response rates(2,9,10,35). Considering the costs of personalization, it has often been questioned whether, given a small increase in response rate, it is worth the large amount of money that can be spent on this aspect(7).

Cover Letter Type

Two studies(8,29) have found that an "egoistic" type of cover letter (emphasizing the importance of the respondent) reaps a higher response than an "altruistic" letter which emphasizes the benefits of the research. Another study(35) that experimented with the inclusion of "social appeal" (the relevance of the research to the respondent's profession) in the cover letter found that this appeal to social utility did not increase response.

Incentives

Almost all studies indicate that the use of an incentive will increase response rates. Incentives can be monetary (e.g., 10¢, 25¢, etc.) or non-monetary (e.g., promise of survey results). In one study(44), response rate was increased by 8 percent with a 10¢ incentive. However, the promise of sending survey results after the return of the questionnaire had no effect on response rate.

With respect to monetary incentives, response rates have been shown to vary with the amount of the incentive. Kephart(27) noted response rates in 1958 of 55-57 percent from a sample of nurses to which he sent 1¢, 5¢, or 10¢ incentives, but to those to whom he sent 25¢, 70 percent of the respondents returned their questionnaires. Thus, on the one hand, the larger the incentive, the higher the response rate. However, upon closer examination, it has been noted that response rates using monetary rewards are not solely dependent upon the amount of the incentive. Rather, what is important, is the reason for giving the respondent a monetary incentive. Response rates are often higher when monetary incentives are given as a token of appreciation and trust, rather than as a payment for the time spent by the respondent. For example, 25¢ given out of appreciation may be a more effective incentive than $2 given for work performed. In the latter case the $2 could be perceived as inadequate payment for one's time. On the other hand, if the incentive becomes large enough to become payment for time spent, it can affect the response rate and/or the quality of the data(14). However, incentives of $25 or $50 are usually impossible.

Other studies have shown that if an incentive is to be offered it should be sent, if not on the first mailing then certainly on the second, for incentives mailed in subsequent mailings do not yield the response increase of earlier mailings.

Length of Questionnaire

Contrary to much public opinion, response rates to mail questionnaires do not decrease drastically in relation to the length of the questionnaire. In many studies that compared questionnaires of differing lengths (all using questionnaires of 12 pages or less), none showed significant differences in response rates(3,8,9,30,36,37). The data conclusively show that the length of the questionnaire is much less important than the ease in which it can be filled out and the interest of the respondent in the topic.

Postage

Studies on different types of postage have yielded varying results. While some studies have shown that a stamped envelope yields a higher response rate than a questionnaire to be returned in a business reply envelope(42,44), other studies have shown that questionnaires mailed by (or returned by) bulk rate, franked or metered postage yield response rates not significantly different than questionnaires utilizing stamps(9,10,17,25,33,36). It may be that "postage appearance is no longer a simple index of a letter's importance"(25).

Color

No significant difference has been shown in the response rates to questionnaires of different colors(15).

Precoding

No significant difference has been found in the response rates to precoded (circle a number) versus nonprecoded (put an "X" on the line) questionnaires(40).

Return Deadline

Many novice mail questionnaire researchers have inherent feelings toward the use or nonuse of the return deadline. By return deadline, we mean that in the cover letter a date is mentioned by which time you ask the respondent to return the questionnaire (e.g., "Please return this questionnaire no later than October 31, 1982"). A study by Henley(20) has shown what the experienced researcher has been discovering for years; that is, use a deadline date in a cover letter if you are, in fact, very serious about that deadline; otherwise don't. In other words, if you are on a very tight time schedule and you will stop data collection as of that date and begin your analysis immediately, then it is a good idea to indicate a return deadline, for in fact, the response *by that date* will be higher than if no date was mentioned. However, after that deadline many fewer questionnaires will be returned, since prospective respondents may feel that it is too late to respond. Conversely, if such a deadline is not indeed a reality, it is best not to suggest a deadline date for return; for, although the rate of return will be slower than

had a deadline been suggested, returns will *continue on* for a longer period of time, equaling the response rate of the deadline questionnaire at a later point (convergence).

In a mail survey of dentists, Roberts(35) conducted a split ballot experiment on the use of a deadline. However, his alternative to no deadline was the statement, "If we have not heard from you in three weeks we will contact you again." Besides issuing a deadline, this statement is also a notice of follow-up, so although returns increased initially this was probably due more to the desire to be "left alone" than to meeting a research deadline.

Anonymity

Although results may vary by topic of questionnaire, questionnaires utilizing name and identification number have shown similar response patterns to questionnaires using an identification number only(30).

Return Envelopes

Return envelopes are a must(28). Never should a respondent be asked to pay for returning his/her questionnaire.

Follow-Ups

Follow-up procedures are the most universally accepted method of increasing response rates to mail questionnaires. Follow-ups have proved to be effective whether they are formal or informal, postcard reminders or duplicate questionnaires, letter alerts or telephone reminders(1,9,13,21,28, 32,36,37,43,44). In fact, follow-ups are almost always the most successful procedure for increasing response rates. Kephart(27) has suggested that it is much better to utilize one's funds for follow-ups rather than for precontact. Overall, and in most circumstances, given the limited funds under which most researchers work, the use of a second mailing to all nonrespondents is probably the most cost effective procedure in a mail survey.

Discussion of Findings

As shown in the previous discussion, many factors can have an effect on the response rate to mail questionnaires, particularly follow-ups to the first mailing. However, because of the large number of variables inherent in any one study (e.g., type of respondent, topic of questionnaire, timing, etc.), it is often difficult to generalize regarding the techniques mentioned to improve response rates. However, even if one could generalize from the aforementioned techniques, it would be naive to do so, for this approach would be overlooking more important aspects of study design.

> The tendency of past research to focus on reaction to individual techniques has had the unfortunate effect of directing attention in the wrong way. Instead of focusing on the prospective respondent, it focused on the technique. As a result, this research ignored the important question of how to *maximize* the probability of response. Instead it asked to what extent does personalization, follow-ups, stamped-return envelopes, or whatever, make a difference in the response. The former is a far more important question, because the answer determines whether the mail questionnaire is a satisfactory data collection method(11:8).

Caveats

As implied in the Dillman statement above, the findings of all the research studies cited in this paper, even if generalizable to your particular study, must be viewed as techniques to improve the final stage of one's study design. Most important is the development of a quality instrument, rather than devising ways to improve the response rate to a poorly developed questionnaire. Only after determining that a mail questionnaire is the most appropriate form of data collection, and only after insuring that the questionnaire is the easiest possible form to understand and answer, is the most professionally formulated, typed and reproduced, and, in other words, is the best possible product to be forwarded to the respondent, should one be concerned with factors such as those discussed previously to improve response rates.

Simply, the surest way to improve response rate to a mail questionnaire is to make it as easy as possible and as rewarding as possible for the respondent to fill out the questionnaire. Dillman(11) forwards three points to remember in order to maximize return. The three points are:

1) *Reward* respondent by:

   Showing positive regard

   Giving verbal appreciation

   Using a consulting approach (e.g., "I need your opinion . . .")

   Supporting values (e.g., this is one way to include public opinion in legislative action)

   Offering tangible rewards (e.g., cash incentive or results of study)

   Making questionnaire interesting

2) *Reduce cost* to respondent by:

   Making tasks appear brief (e.g., easy to follow questionnaire)

   Reducing physical and mental effort

   Eliminating chances for embarrassment (e.g., not asking questions about which respondent won't know)

Eliminating direct monetary cost (e.g., return envelope and stamp)

3) Establish *trust* by:

Providing a token of appreciation in advance (incentive, tangible or intangible)

Identifying with a known organization that has legitimacy

Building on other exchange relationships (e.g., your employer or professional association approves of/ supports this study)

As you can see by the list just suggested, obtaining response to a questionnaire is very much a result of good planning, foresight, and regard for the respondent. It is difficult, if not impossible, to determine, before the fact, how various factors such as postage stamps, incentives, or personalization will affect any particular questionnaire. The survey response, as many studies have shown, is an extremely multivariate problem(19,23,24,41); no simple charts can direct one to the most appropriate techniques. The most important investment in insuring a good return is the time spent before the initial mailing of the questionnaire in order to insure that the cover letter and questionnaire are in the best possible form to be filled out by the respondent. The areas of question construction, questionnaire design and formatting are the most crucial stages of the study. (Two excellent treatments of study design for mail questionnaires are Erdos, *Professional Mail Surveys*(12), and Dillman, *Mail and Telephone Surveys*(11).) Once everything possible has been done to insure the questionnaire is at the highest quality possible, *then* one can utilize some of the additional techniques for increasing the return rate of the questionnaire. In a sense, the mail questionnaire is like a diamond: if the diamond has been cut well, it is a fine piece which will be enhanced by good polishing; however, if the diamond has been poorly cut, no amount of polishing can improve its quality.

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Guidelines for Submission of Articles and Book Reviews

As members of Eta Sigma Gamma, you are encouraged to submit articles and research summaries to the editor for possible publication in the 1983 Fall/Winter publication before October 5, 1983.

All contributions should be typed, one side of paper only, and double-spaced, sent in duplicate form and should deal with some aspect of the health discipline. Articles should be no longer than approximately 1500-2000 words and may be accompanied by a limited number of black and white photographs, clear graphs, and charts wherever appropriate.

Contributors of manuscripts should be active members of Eta Sigma Gamma. Exceptions to this policy would include special solicited manuscripts and addresses delivered at Eta Sigma Gamma meetings. Authors are asked to include their current degree, rank and/or position wherever applicable, and their current active chapter affiliation.

Authors of non-accepted manuscripts will be notified and their papers will be returned. However, if accepted manuscripts cannot be included in the next issue because of space shortage, they will be published in the following issue unless the author requests otherwise.

Reviews of current health publications are invited and should be sent to the editor. These reviews, sent for consideration, should be approximately 500-600 words in length.